

Peer-reviewed conference papers 2011

*) Co-publication academy - industry

| Authors | Title of paper | Name of conference | Location of conference |
|---|---|--|------------------------|
| <u>KMC</u> | | | |
| H. Nilsson, R. Lundin, E. Bengtsson, L. Gustavsson, CO. Jonson, T. Vikström | Support System for Medical Command and Control at Major Incidents | 17th World Congress on Disaster and Emergency Medicine | Beijing, China |
| CO. Jonson, H. Nilsson, R. Lundin, T. Vikström, A. Rüter | Regional Command and Control Management of Influenza A(H1N1) Mass Vaccination in the County Council of Östergötland, Sweden | 17th World Congress on Disaster and Emergency Medicine | Beijing, China |
| T. Vikström | How can we improve disaster drill? | 16th Congress on Japanese Association for Disaster Medicine | Osaka |
| <u>Chalmers</u> | | | |
| H. Zhao, T.D. Thanh Ngoc, P. Sobis, et al | Characterization of thin film resistors and capacitors integrated on GaAs membranes for submillimeter wave circuit applications | 23rd International conference on Indium Phosphide and Related Materials - IPRM 2011 | Berlin, Germany |
| S. Cherednichenko, A. Hammar, S. Bevilacqua, et al | Wideband THz detectors based on YBCO thin films at 77K and at room temperature | 6th ESA Workshop on Millimetre-Wave Technology and Applications | Espoo, Finland |
| R. Dahlbäck, J. Vukusic, J. Stake | Development of a waveguide integrated sub-millimetre wave spatially power combined HBV multiplier | 6th ESA Workshop on Millimetre-Wave Technology and Applications and 4th Global Symposium on Millimeter Waves, | Espoo, Finland |
| J. Hanning, T. Bryllert, J. Stake, et al | HBV MMIC frequency tripler and quintupler for high power THz applications | 6th ESA Workshop on Millimetre-Wave Technology and Applications and The 4th Global Symposium on Millimeter Waves GSMM2011, May 23rd – May 25th | Espoo, Finland |
| T. Rubaek, R. Dahlbäck, A. Fhager, et al | A THz imaging system for biomedical applications | Proceedings of the 5th European Conference on Antennas and Propagation, EUCAP 2011 | Rome |
| P. Sobis, J. Stake, A. Emrich | A 340 GHz 2SB Schottky Receiver for Earth Observation Applications | 22nd International Symposium on Space Terahertz Technology | Tucson, Arizona, USA |
| J. Stake, H. Zhao, P. Sobis, et al | Development of a Compact 557 GHz Heterodyne Receiver | 6th ESA Workshop on Millimetre-Wave Technology and Applications | Espoo, Finland |
| A.Y. Tang, E. Schlecht, G. Chattopadhyay, et al | Steady-State and Transient Thermal Analysis of High-Power Planar Schottky Diodes | 22nd International Symposium on Space Terahertz Technology | Tucson, Arizona, USA |
| <u>LiU</u> | | | |
| Tohid Ardeshiri, Fredrik Larsson, Fredrik Gustafsson, Thomas B. Schön, Michael Felsberg | Bicycle Tracking Using Ellipse Extraction | 14th International Conference on Information Fusion, 2011 | Chicago |
| Patrik Axelsson, Umut Orguner, Fredrik Gustafsson, Mikael Norrlöf | ML Estimation of Process Noise Variance in Dynamic Systems | 18th IFAC World Congress | Milano |
| Zoran Sjanic, Fredrik Gustafsson | Navigation and SAR Auto-focusing Based on the Phase Gradient Approach | 14th International Conference on Information Fusion (Fusion 2011) | Chicago |
| Niklas Wahlström, Jonas Callmer, Fredrik Gustafsson | Single target tracking using vector magnetometers | International Conference on Acoustics, Speech and Signal Processing | Prague |
| Emre Özkan, Christian Lundquist, Fredrik Gustafsson | A Bayesian Approach to Jointly Estimate Tire Radii and Vehicle Trajectory | International IEEE Conference on Intelligent Transportation Systems | Washington, DC, USA |
| Åström Freddie, Felsberg Michael, Lenz Reiner | Color Persistent Anisotropic Diffusion of Images | Image Analysis | Ystad, Sweden |
| Andreas Krebs, Johan Wiklund, Michael Felsberg | Optimization of Quadrature Filters Based on the Numerical Integration of Improper Integrals | Pattern Recognition | Ystad, Sweden |
| Fredrik Larsson, Michael Felsberg | Using Fourier Descriptors and Spatial Models for Traffic Sign Recognition | Scandinavian Conference on Image Analysis (SCIA) | Ystad, Sweden |
| Marcus Wallenberg, Michael Felsberg, Per-Erik Forssén, Babette Dellen | Channel Coding for Joint Colour and Depth Segmentation | Pattern Recognition 33rd DAGM Symposium, Frankfurt/Main, Germany, August 31 - September 2 | Frankfurt |
| Ebrahim Avazkonandeh Gharavol, Erik G. Larsson | Robust Joint Optimization of MIMO Interfering Relay Channels with Imperfect CSI | 4th IEEE International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP) | San Juan, PR, USA |
| Ebrahim Avazkonandeh Gharavol, Erik G. Larsson | Robust Joint Optimization of MIMO Two-Way Relay Channels with Imperfect CSI | Allerton Conference on Communication, Control, and Computing | Illinois |
| Ebrahim Avazkonandeh Gharavol, Erik G. Larsson | Robust Joint Optimization of Non-regenerative MIMO Relay Channels with Imperfect CSI | 45th Annual Asilomar Conference on Signals, Systems, and Computers | Pacific Grove, CA |
| Erik Axell, Erik G. Larsson | Multiantenna Spectrum Sensing of a Second-Order Cyclostationary Signal | 4th IEEE International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP11) | San Juan, PR, USA |
| Erik Axell, Erik G. Larsson | Spectrum Sensing of Signals with Structured Covariance Matrices Using Covariance Matching Estimation Techniques | IEEE Global Communications Conference (GLOBECOM) | Houston, Texas, USA |
| Erik Axell, Erik G. Larsson | A Unified Framework for GLRT-Based Spectrum Sensing of Signals with Covariance Matrices with Known Eigenvalue Multiplicities | IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP) | Prague |

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| Eleftherios Karipidis, David Gesbert, Martin Haardt, Ka-Ming Ho, Eduard A. Jorswieck, Erik G. Larsson, Jianhui Li, Johannes Lindblom, Christian Scheunert, Martin Schubert, Nikola Vučić | Transmit Beamforming for Inter-Operator Spectrum Sharing | Future Network and Mobile Summit Conference | Warsaw, Poland | *) |
| Eleftherios Karipidis, Di Yuan, Erik G. Larsson | Mixed-Integer Linear Programming Framework for Max-Min Power Control with Single-Stage Interference Cancellation | IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP) | Prague | |
| Johannes Lindblom, Eleftherios Karipidis, Erik G. Larsson | Closed-Form Parameterization of the Pareto Boundary for the Two-User MISO Interference Channel | IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP) | Prague | |
| Johannes Lindblom, Eleftherios Karipidis, Erik G. Larsson | Efficient Computation of the Pareto Boundary for the Two-User MISO Interference Channel with Multi-User Decoding Capable Receivers | 4th IEEE International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP) | San Juan, PR, USA | |
| Chen Luo, Yi Wu, Zesong Fei, Erik G. Larsson, Jingming Kuang | Adaptive Partial Decode-and-Forward Relaying with Quantized Feedback | IEEE Vehicular Technology Conference (VTC) | Budapest, Hungary | |
| Saif Khan Mohammed, Erik G. Larsson | A low complexity user grouping based multiuser MISO downlink precoder | IEEE Global Communications Conference (GLOBECOM) | Houston, Texas, USA | |
| Reza Moosavi, Erik G. Larsson | A Fast Scheme for Blind Identification of Channel Codes | IEEE Global Communications Conference (GLOBECOM) | Houston, Texas, USA | |
| Hien Quoc Ngo, Trung Q. Duong, Erik G. Larsson | Uplink Performance Analysis of Multicell MU-MIMO with Zero-Forcing Receivers and Perfect CSI | IEEE Swedish Communication Technologies Workshop (Swe-CTW) | Stockholm | |
| Hien Quoc Ngo, Thomas L. Marzetta, Erik G. Larsson | Analysis of the Pilot Contamination Effect in Very Large Multicell Multiuser MIMO Systems for Physical Channel Models | IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP) | Prague | *) |
| Quoc Hien Ngo, Erik G. Larsson, Thomas L. Marzetta | Uplink Power Efficiency of Multiuser MIMO with Very Large Antenna Arrays | Allerton Conference on Communication, Control, and Computing | Illinois | *) |
| Chaitanya Tumula V. K., Erik G. Larsson | Optimal Resource Allocation for IR-HARQ | IEEE Swe-CTW | Stockholm | |
| Yi Wu, Zhiqiang Tang, Erik G. Larsson | Optimization of Frame Length in OFDMA Systems Taking into Account the Control Signaling Cost | IEEE Vehicular Technology Conference (VTC), 2011 | Budapest, Hungary | |
| Mirsad Ćirkić, Daniel Persson, Erik G. Larsson | New Results on Adaptive Computational Resource Allocation in Soft MIMO Detection | IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP) | Prague | |
| Mirsad Ćirkić, Daniel Persson, Erik G. Larsson, Jan-Åke Larsson | Gaussian Approximation of the LLR Distribution for the ML and Partial Marginalization MIMO detectors | IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP) | Prague | |
| Jonas Fritzin, Christer Svensson, Atila Alvandpour | A +32dBm 1.85GHz Class-D Outphasing RF PA in 130nm CMOS for WCDMA/LTE | IEEE European Solid-State Circuits Conference (ESSCIRC) | Helsinki, Finland | |
| Behzad Mesgarzadeh, Iman Esmaeil Zadeh, Atila Alvandpour | A multi-segment clocking scheme to reduce on-chip EMI | IEEE International SoC Conference (SoCC) | Taipei, Taiwan | |
| Ali Fazli Yeknami, Mostafa Savadi Osgooei, Atila Alvandpour | A Programmable-Bandwidth Amplifier for Ultra-Low-Power Switched-Capacitor Application | IEEE European Conference on Circuit Theory and Design (ECCTD) | Linköping, Sweden | |
| Dai Zhang, Ameya Bhide, Atila Alvandpour | A 53-nW 9.12-ENOB 1-kS/s SAR ADC in 0.13-um CMOS for medical implant devices | IEEE European Solid-State Circuits Conference (ESSCIRC) | Helsinki, Finland | |
| Dai Zhang, Christer Svensson, Atila Alvandpour | Consumption Bounds for SAR ADCs | European Conference on Circuit Theory and Design (ECCTD) | Linköping, Sweden | |
| Mikael Asplund, Anton Thomasson, Ekhiotz Jon Vergara Alonso, Simin Nadjm-Tehrani | Software-related Energy Footprint of a Wireless Broadband Module | The 9th ACM International Symposium on Mobility Management and Wireless Access (MobiWac) | Miami, USA | |
| Iker Burguera, Urko Zurutuza, Simin Nadjm-Tehrani | Crowdroid: Behavior-Based Malware Detection System for Android | Workshop on Security and Privacy in Smartphones and Mobile Devices, SPSM, 2011 | Chicago, IL, USA | |
| Jorid Cucurull, Simin Nadjm-Tehrani, Massimiliano Raciti | Modular anomaly detection for smartphone ad hoc communication | 16th Nordic Conference on Secure IT Systems, NordSec 2011, LNCS | Tallinn, Estonia | |
| Erik Kuiper, Simin Nadjm-Tehrani | Predicting the Performance of Geographic Delay-Tolerant Routing | Military Communications Conference, MILCOM | Baltimore, MD, USA | |
| Simin Nadjm-Tehrani, Maria Vasilevskaya | Towards a Security Domain Model for Embedded Systems | 13th IEEE International Symposium on High Assurance Systems Engineering (HASE) | Boca Raton, Florida | |
| Massimiliano Raciti, Jorid Cucurull, Simin Nadjm-Tehrani | Energy-based adaptation in simulations of survivability of ad hoc communication | IFIP Wireless Days, WD | Niagara Falls, ON, Canada | |
| Ekhiotz Jon Vergara Alonso, Simin Nadjm-Tehrani, Mikael Asplund, Urko Zurutuza | Resource Footprint of a Mincast Protocol Implementation on Multiple Mobile Platforms | The Fifth IEEE International Conference on Next Generation Mobile Applications | Cardiff, United Kingdom | |
| Henrik Eriksson, Massimiliano Raciti, Maurizio Basile, Alessandro Cunsolo, Anders Fröberg, Ola Leifler, Joakim Ekberg, Toomas Timpka | A Cloud-Based Simulation Architecture for Pandemic Influenza Simulation | AMIA Annual Symposium Proceedings 2011 | Washington, DC | |
| M. Eriksson, D. Lindgren, R. Bjorklund, F. Winquist, H. Sundgren, I. Lundström | Drinking water monitoring with voltammetric sensors | EuroSensors XXV | Athens, Greece | |
| FOI | | | | |
| M. B. Guldogan, F. Gustafsson, U. Orguner, S. Björklund, H. Petersson, A. Nezirovic | Human Gait Parameter Estimation Based on Micro-Doppler Signatures Using Particle Filters | IEEE ICASSP | Prague, Czech Republic | |
| M. Axelsson, M. Karlsson, S. Rudner | A multicamera positioning system for steering of a THz stand-off scanner | SPIE Defence, Security and Sensing | Orlando, USA | |
| A. Nezirovic | Stationary Clutter- and Linear-trend Suppression in Impulse-Radar-based Respiratory Motion Detection | ICUWB2011 | Bologna, Italy | |
| J A Kjellgren, J Svedin, Ken Cooper | Standoff imaging of a masked human face using a 670 GHz high-resolution radar | SPIE Security and Defence | Prague, Czech Republic | |
| J Rantakokko, P Händel, J. Rydell, E Emilsson | Working towards scenario-based evaluations of first responder positioning systems. | Precision Indoor Personnel Location and Tracking Technology Workshop | Worcester, USA | |
| J. Rydell and E. Emilsson | (Position Evaluation)*2 | Indoor Positioning and Indoor Navigation (IPIN) | Guimaraes, Portugal, | |

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| Kia Wiklundh | Statistical methods for radio frequency interference when estimating the performance degradation of digital radio receivers | URSI GASS | Instanbul, Turkey |
| Javier Ferrer Coll, Jose Dolz Martin de Ojeda, Peter Stenumgaard, Silvia Marzal Romeu, José Chilo | Industrial Indoor Environment Characterization Propagation Models | EMC Europé 2011 | York, United Kingdom |
| Javier Ferrer Coll, Per Ångskog, José Chilo, Peter Stenumgaard | Industrial Environment Characterization for Future M2M Applications | IEEE International Symposium On Electromagnetic Compatibility | Long Beach, USA |
| Peter Stenumgaard, Kia Wiklundh | A Simple Method for Dynamic Frequency Allocation Considering the Total Interference Impact on the Bit Error Probability | EMC Europe 2011 | York, United Kingdom |
| T Johansson, J Rahm, J Gustavsson, S Nilsson, A Sume A Örbom, | Through-the-wall detection of human activity | SPIE Defence, Security and Sensing, | Orlando, USA |
| S. Björklund, H. Petersson, A.Nezirovic, M. B. Guldogan, F. Gustafsson | Millimeter-Wave Radar Micro-Doppler Signatures of Human Motion | IRS 2011 | Leipzig, Germany |
| A Ehlerding, I Johansson, S Wallin, H Östmark | Stand-off detection of vapor phase explosives by resonance enhanced Raman spectroscopy. | SPIE Europe Security + Defence | Prague, Czech Republic |
| C Grönwall, J Rydell, J Bjärkefur, A Karlsson | Submap joining smoothing and mapping for camera-based indoor localization and mapping | SPIE Defence, Security and Sensing | Orlando, USA |
| F Johansson, C Mårtenson, P Svenson | A Social Network Analysis of the Information Fusion Community. | 14th International Conference on Information Fusion | Chicago, USA |
| H Granlund, R Granlund | GPS Impact on Performance, Response Time and Communication - A Review of Three Studies | The 8th International Conference on Information Systems for Crisis Response and Management | Lisbon, Portugal |
| H Granlund, R Granlund, N Dahlbäck | The Effect of a GPS on Learning with Regards to Performance and Communication in Municipal Crisis Response. | International Conference on Human-Computer Interaction | Rome, Italy |
| H Granlund, R Granlund, N Dahlbäck | Performance of Municipal Crisis Management Teams - The impact of GPS in a C4ISTAR mission environment | 16th International Command and Control Research and Technology Symposium | Québec, Canada |
| K-G Stenborg, M Herberthson, R Forchheimer | Distribution of individually watermarked content in Peer-to-peer networks. | 4th IFIP Int. conf. on new technologies, Mobility and Security, NTMS 2011 | Paris, France |
| M Eriksson, H Granlund, L Yngström, J Hallberg | On the Information Security Posture in an Government Agency - a Longitudinal Study 2008-2011. | The European Security Conference 2011, ESC 2011 | Örebro, Sweden |
| R Granlund, H Granlund, N Dahlbäck | Differences between Students and Professionals While Using a GPS Based GIS in an Emergency Response Study. | International Conference on Human-Computer Interaction | Rome, Italy |
| H Önnerud, S Wallin, H Östmark, D Menning, S Ek, H Ellis, M Kolhed | LOCALISATION OF THREAT SUBSTANCES IN URBAN SOCIETY - LOTUS: A viable tool for finding illegal bomb factories in cities | SPIE Defence, Security and Sensing | Orlando, USA |
| M Nordberg, M Åkeson, H Östmark, T E Carlsson | Stand-off detection of explosive particles by imaging Raman spectroscopy | SPIE Defence, Security and Sensing | Orlando, USA |
| L.M.H. Ulander, R. Baqué, H. Cantalloube, P. Dreuillet, B. Flood, P.-O. Fröling, A. Gustavsson, T. Jonsson, B. Larsson, D. Murdin, R. Ragnarsson, O. Ruault du Plessis, and G. Stenström | Observations of clutter suppression in bistatic VHF/UHF-band synthetic-aperture radar | SPIE Defence, Security and Sensing | Orlando, USA |
| G. Carvajal, L.E.B. Eriksson, L.M.H. Ulander | Retrieval and assessment of sub-mesoscale wind velocity vectors with synthetic aperture radar | IGARSS | Vancouver, Canada *) |
| M Holmberg, P Svenson | Information fusion for collaborating commanders at different levels | ICCRTS 2011 | Washington, USA *) |
| J Dahlin, P Svenson | A Method for Community Detection in Uncertain Networks | European Intelligence and Security Informatics 2011 | Athens, Greece *) |
| R Forsgren, A Horndahl, P Svenson, E Tjörnhamar | Information fusion for port security decision support | European Intelligence and Security Informatics 2011 | Athens, Greece |
| L Kaati, P Svenson | Analysis of Competing Hypothesis for Investigating Lone Wolf Terrorists | International Symposium on Open Source Intelligence and Web Mining 2011 | Athens, Greece |
| F Johansson, J Brynielsson, P Hörling, M Malm, C Mårtenson, S Truvé, M Rosell | Detecting Emergent Conflicts through Web Mining and Visualization | International Symposium on Open Source Intelligence and Web Mining 2011 | Athens, Greece *) |
| E T Hvannberg, S Lindquist, M Nirbrant | A Theory of Skills of Software, Interaction and Graphics Designers: Contrasting Aspects Emerging from Empirical Studies | DESIRE 2011 | Eindhoven, Nederländerna *) |
| V Mojtahed, M Eklöf, J Zdravkovic | Towards Semantic Interoperability between C2 Systems Following the Principles of Distributed Simulation | ICCRTS 2011 | Washington, USA *) |
| H Asadi, V Mojtahed, M Eklöf | BOM Matching and Semantic Validation | Fall SIW 2011 | Orlando, USA |
| C Mårtenson, A Horndahl, Z Kabir | An Ontology-based Adaptive Reporting Tool | 6th International Conference on Semantic Technologies for Intelligence, Defense, and Security | Fairfax, USA *) |
| H Artman, J Brynielsson, B JE Johansson, J Trnka | Dialogical Emergency Management and Strategic Awareness in Emergency Communication | ISCRAM 2011 | Lisbon, Portugal |
| H Önnerud, S Wallin, H Östmark | Localisation of threat substances in urban society-LOTUS: Tomorrow's system for finding illicit manufacturing of drugs and home made explosives | EISIC 2011, European Intelligence Security Informatics Conference | Athens, Greece |
| M. Henriksson and L. Sjöqvist | Time-correlated single-photon counting laser radar in turbulence | SPIE Security+Defence, | Prague, Czech Republic |
| L. Sjöqvist, L. Allard, O. Gustafsson, M. Henriksson, M. Pettersson | Turbulence effects in a horizontal propagation path close to ground: implications for optics detection | SPIE Security+Defence, I | Prague, Czech Republic |
| O. Steinvall, M. Elmqvist, and H. Larsson | See around the corner using active imaging | SPIE Security+Defence, | Prague, Czech Republic |
| O. Steinvall, M. Elmqvist, K. Karlsson, O. Gustafsson, and T. Chevalier | Slant path 1.5 µm range gated imaging close to ground | SPIE Defence and Security | Orlando, USA |
| J Hansson, R Granlund, N Hallberg, F Lantz, E Jungert | A reference context model for development of security systems | Int. Conf. on Distributed Multimedia Systems | Florence, Italy |
| D Andersson, M Granåsen, T Sundmark, H Holm, J Hallberg | Exploratory sequential data analysis of a cyber defence exercise. | Int. Defense and homeland security simulation workshop DHSS | Rome, Italy |