ANNUAL REPORT

Department of
Electrical and Computer Engineering

June 1, 2012

Submitted by:

Fabrice Labeau, ing.
Interim Chair
Section II: Grants, publications, and service outside of McGill

II-C ECE SCHOLARLY WORKS FOR THE PERIOD JANUARY 1ST, 2011 TO DECEMBER 31ST, 2011

(URL of publications: http://www.mcgill.ca/ece/about/publications)

For jointly authored papers, the bibliographic details appear only once; under the list of publications for co-authors, a reference to the first appearance of the publication is added.

II-C.1 ARTICLES IN REFEREED PUBLICATIONS:

ARBEL, TAL:


BAJCSY, JAN:


BOUFFARD, FRANCOIS:


BOULET, BENOIT:


CAINES, PETER E.:


CHAMPAGNE, BENOIT:

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CHEN, LAWRENCE R.:


CHODAVARAPU, VAMSY:


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CLARK, JAMES J.:


COATES, MARK J.:


COOPERSTOCK, JEREMY R.:


EL-GAMAL, MOURAD N.:

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FERRIE, FRANK P.:


GIANNACOPOULOS, DENNIS:


GROSS, WARREN J.:


JOOS, GEZA:


KHAZAKA, RONI:


KIRK, ANDREW:

‘Selective polarization mode excitation in InGaAs/GaAs microtubes using an adiabatically tapered fiber’, OSA Optics Letters 36 (17), pp 3506-3508, 2011


‘Single rolled-up InGaAs/GaAs quantum dot microtubes integrated with silicon-on-insulator waveguides’, OSA Optics Express 19, pp 12164-12171, 2011

LABEAU, FABRICE:


LEIB, HARRY:


LE-NGOC, THO:


[69] Quang Le-Dang and Tho Le-Ngoc, ”Opportunistic Multicasting Scheduling using Erasure-Correction Coding over Wireless Channels”, EURASIP Journal on Wireless


LIBOIRON-LADOUCEUR, ODILE:


LOWTHER, DAVID A.:


MAHAJAN, ADITYA:

MEYER, BRETT:

MI, ZETIAN:

MICHALSKA, HANNAH:

PLANT, DAVID V.:
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POPOVIC, MILICA:


PSAROMILIGKOS, IOANNIS:

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RABBAT, MICHAEL:


[34] [35]

ROBERTS, GORDON:


ROCHETTE, MARTIN:


SHIH, ISHIANG:


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#### SZKOEK, THOMAS:

<table>
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#### VU, MAI:

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#### WEBB, JONATHAN:

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#### ZENG, HAIBO:

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<th>Journal/Conference</th>
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ZILIC, ZELJKO:


II-C.2 OTHER PUBLICATIONS

ABHARI, RAMESH:


ARBEL, TAL:


BAJCSY, JAN:


BOUFFARD, FRANCOIS:


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BOULET, Benoit:


CAINES, Peter E.


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CHAMPAGNE, BENOIT:


CHEN, LAWRENCE R.:


J. Qiu, Z. Yin, K. Sun, L. R. Chen, M. Rochette, J. Wu, L. Zhao, and W. Wang, "Wavelength tolerance of an all-optical multi-logic gate based on XPM in a HNLF," Optoelectronica and Communications Conference, 4-8 July 2011, Kaoshiung, Taiwan.


P. Samadi, L. R. Chen, I. Kostko, P. Dumais, C. L. Callender, S. Jacob, B. Shia, "Reconfigurable time-domain demultiplexing of optical signals at 40 Gb/s," Conference on Optical Fiber Communications, 6 - 10 March 2011, Los Angeles, CA.


Au, C.E., Ng, V. and Clark, J.J., “MirrorMap: Augmenting 2D Mobile Maps with Virtual Mirrors”, 2011 Mobile HCI conference


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COOPERSTOCK, JEREMY R.:


**EL-GAMAL, MOURAD N.:**


M. Elsayed, F. Nabki, M. Sawan, and M. N. El-Gamal, "A 5V MEMS gyroscope with 3 aF/degree/s sensitivity, 0.6 degree/root_square(Hz) mechanical noise and drive-sense crosstalk minimization," the IEEE International Conference on Microelectronics (ICM Dec.’11), accepted, 4 pages, December 2011.


**FERRIE, FRANK P.:**


**GIANNACOPOULOS, DENNIS:**


**GROSS, WARREN J.:**

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JOOS, GEZA:


KABAL, PETER:


KHAZAKA, RONI:

KIRK, ANDREW G.:  


[LABEAU, FABRICE]:  


LEIB, HARRY:  


LE-NGOC, THO:  


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LEVINE, MARTIN D.:
[C146] Jian Li (NUDT), Martin Levine (McGill), Xiangjing An (NUDT), Hangen He (NUDT) Saliency Detection Based on Frequency and Spatial Domain Analyses, BMVC 2011, The 22nd British Machine Vision Conference, University of Dundee, 29 August - 2 September 2011

LIBOIRON-LADOUCEUR, ODILE:

LOWTHER, DAVID A.:

MAHAJAN, ADITYA:
Section II: Grants, publications, and service outside of McGill

MEYER, BRETT:


MI, ZETIAN:


[C110]

[C166] Invited: Z. Mi, S. Zhao, S. Fathololoumi, and K. Cui “Nearly intrinsic InN nanowire: epitaxial growth, properties and device applications,” International Workshop on Quantum Nanostructures and Nanoelectronics, University of Tokyo, Tokyo, Japan, Oct. 3-4, 2011.


H. P. T. Nguyen, K. Cui, S. Zhang, X. Han, Z. Mi, “InGaN/GaN dot-in-a-wire nanoscale heterostructures and high-efficiency light emitting diodes on Si,” 5th (OSA) International Conference on Nanophotonics, Fudan University, Shanghai, China, May 22-26, 2011.


H. P. T. Nguyen, S. Zhang, K. Cui, X. Han, and Z. Mi, “Molecular beam epitaxial growth, fabrication, and characterization of high efficiency InGaN/GaN dot-in-a-wire light emitting diodes on Si(111),” 219th Electrochemical Society Meeting, Montreal, Canada, May 1-6, 2011.


H. P. T. Nguyen, K. Cui, S. Zhang, X. Han, Z. Mi, “InGaN/GaN dot-in-a-wire nanoscale heterostructures and high-efficiency light emitting diodes on Si,” 5th (OSA) International Conference on Nanophotonics, Fudan University, Shanghai, China, May 22-26, 2011.


H. P. T. Nguyen, S. Zhang, K. Cui, X. Han, and Z. Mi, “Molecular beam epitaxial growth, fabrication, and characterization of high efficiency InGaN/GaN dot-in-a-wire light emitting diodes on Si(111),” 219th Electrochemical Society Meeting, Montreal, Canada, May 1-6, 2011.


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POPOVIC, MILICA


[C60] 

[C66] 

[C67]
### PSAROMILIGKOS, IOANNIS N.:


### RABBAT, MICHAEL:

- **[C211]** K.I. Tsianos and M.G. Rabbat, “Distributed consensus and optimization under communication delays,” Allerton Conference on Communication, Control, and Computing, Urbana-Champaign, September, 2011.
- **[C64]**
- **[C65]**

### ROBERTS, GORDON W.:


### ROCHETTE, MARTIN:

Section II: Grants, publications, and service outside of McGill


[C225] R. Ahmad and M. Rochette, “Photosensitivity at 1550 nm and Bragg grating inscription in As2Se3 microwires for sensing applications,” postdeadline presentation at the OSA Specialty optical fibers (SOF), SOWE1, Toronto, Canada, June (2011).


ROSE, RICHARD C.:  


SHIH, ISHIANG:  


SZKOPEN, THOMAS:  


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[VU, MAI]:


[WEBB, JONATHAN P.]:


[ZENG, HAIBO]:


ZILIC, ZELJKO:


Z. Zilic and B. Karajica, “Teaching for Evolution Towards Embedded Multi-sensory Interfaces,” Proceedings of IEEE International Conference on Microelectronics Systems Education, MSE’11, Jun. 2011, pp. 1-4. (This paper has earned the opening presentation slot, which even our awarded papers at the same conference have not achieved)


Y. Pang, K. Radecka and Z. Zilic, "An Efficient Hybrid Engine to Perform Range Analysis and Allocate Integer Bit-widths for Arithmetic Circuits", Proceedings of ACM/IEEE Asia and South Pacific Design Automation Conference, ASP-DAC 2011, Jan. 2011, pp. 455-460. (acceptance rate 34%: 102 papers out of 300; acceptance is lower for long papers like this one)
