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Program in Chronological Order

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* Following Paper Title – Paper not Available

Monday, October 29, 2018

A1L-A: 08:30-10:00 — Ambassador C
Bio-Circuits & Systems (Oral Session)
Chair: Robert Sobot *(ENSEA - Universite Cergy-Pontoise - CNRS)*
Co-Chair: Takashi Tokuda *(Nara Institute of Science and Technology (NAIST))*

A1L-B: 08:30-10:00 — Ambassador A
SPECIAL SESSION: Innovative Circuits & Techniques for Bio-Sensing, Stimulation, & Interfacing (Oral Session)
Chair: Amir Sodagar *(York University)*
Co-Chair: Hossein Kassiri *(York University)*

A1P-C: 10:00-17:00 Foyer
Bio-Circuits & Systems (Poster Session)
Chair: Carolina Mora Lopez *(imec)*

A1P-D: 10:00-17:00 Foyer
Biosensors & Biomedical Signals (Poster Session)
Chair: Behnaz Ghoraani *(Florida Atlantic University)*

A1P-E: 10:00-17:00 Foyer
Cognitive Computing & Deep Learning in Life Sciences (Poster Session)
Chair: Hao Yu *(Southern University of Science Technology (SUSTech))*

A1P-F: 10:00-17:00 Foyer
Control & Signal Processing for LS (Poster Session)
Chair: Paresa Modarres *(McGill University)*

A3L-A: 13:30-15:00 Ambassador C
Biosensors & Biomedical Signals (Oral Session)
Chair: Michael Liebling *(Idiap Research Institute)*
Co-Chair: Kiyotaka Sasagawa *(Nara Institute of Science and Technology (NAIST))*

A3L-B**:** 13:30-15:00 Ambassador A
SPECIAL SESSION: Sensors & Actuators for Animal Models (Oral Session)
Chair: Sylvain Martel *(École Polytechnique de Montréal)*
Co-Chair: Benoît Gosselin *(Laval University)*

A4L-A**:** 15:30-17:00 Ambassador C
Cognitive Computing & Deep Learning in Life Sciences (Oral Session)
Chair: Sameer Antani *(NIH/NLM/LHC)*
Co-Chair: Neila Mezghani *(TÉLUQ University / CHUM)*

A4L-B**:** 15:30-17:00 Ambassador A
SPECIAL SESSION: Creating a Culture of Collaboration (Oral Session)
Chair: Carole C. Carey *(IEEE Standards Association)*

Tuesday, October 30, 2018

B1L-A**:** 08:30-10:00 Ambassador C
Engineering for Life Sciences (Oral Session)
Chair: Behnaz Ghoraani *(Florida Atlantic University)*
Co-Chair: Jennifer Blain Christen *(Arizona State University)*

B1L-B**:** 08:30-10:00 Ambassador A
SPECIAL SESSION: Microfluidics for Biological Analysis (Oral Session)
Chair: Steve Shih *(Concordia University)*
Co-Chair: Sara Mahshid *(McGill University)*

B1P-C: 10:00-17:00 Foyer
Wearable & Consumer Apps for Health & Wellness (Poster Session)
Chair: Stefan Mozar *(Dynexsys)*

B1P-D: 10:00-17:00 Foyer
Engineering for Life Sciences (Poster Session)
Chair: Jennifer Blain Christen *(Arizona State University)*

B1P-E: 10:00-17:00 Foyer
Rehabilitation & Assistive Technologies (Poster Session)
Chair: Laurent Bouyer *(Laval University)*

B1P-F: 10:00-17:00 Foyer
Extreme Environment Medicine (Poster Session)
Chair: Tobias Cibis *(MAD Lab, Friedrich Alexander Universität Erlangen)*

B4L-A: 13:30-15:00 Ambassador C
Wearable & Consumer Apps for Health & Wellness (Oral Session)
Chair: Carolyn McGregor *(University of Ontario Institute of Technology)*
Co-Chair: Stefan Mozar *(Dynexsys)*

B4L-B: 13:30-15:00 Ambassador A
SPECIAL SESSION: EMG Sensing & Signal Processing (Oral Session)
Chair: Erik Scheme *(University of New Brunswick)*
Co-Chair: Benoît Gosselin *(Laval University)*

B5L-A**:** 15:30-17:00 Ambassador C
Rehabilitation & Assistive Technologies (Oral Session)
Chair: Bruce Wheeler *(University of Florida)*
Co-Chair: Marina Martinez *(Université de Montréal)*

15:48 B5L-A.2
Muscle Activity Distribution Features Extracted from HD sEMG to Perform Forearm Pattern Recognition 275-278
François Nougarou *(Université du Québec à Trois-Rivières)*; Alexandre Campeau-Lecours *(Université Laval)*; Md. Rabiul Islam *(Université du Québec à Trois-Rivières)*; Daniel Massicotte *(Université du Québec à Trois-Rivières)*; Benoît Gosselin *(Université Laval)*

16:06 B5L-A.3
Preprocessing and Normalization of 3D-Skeleton-Data for Human Motion Recognition 279-282
Jan Paul Vox *(Jade University of Applied Sciences)*; Frank Wallhoff *(Jade University of Applied Sciences)*

16:24 B5L-A.4
Development and Verification of a Low-Cost Prosthetic Knee Motion Sensor 283-286
McNiel-Inyani Keri *(University of Alberta)*; Ahmed Shehata *(University of Alberta)*; Quinn Boser *(University of Alberta)*; Albert Vette *(University of Alberta)*; Jacqueline Hebert *(University of Alberta)*

B5L-B**:** 15:30-17:00 Ambassador A
SPECIAL SESSION: Hybrid Microfluidic, Microelectronic and/or Microwave Technologies for Life Science (Oral Session)
Chair: Ebrahim Ghafar-Zadeh *(York University)*
Co-Chair: Mohammad Zarifi *(University of British Columbia)*

15:30 B5L-B.1
Highly Selective Conductometric Sensors with Metallic Nanoclusters for Detection of Hg2+Ions in Water 287-290
Falah Awwad *(United Arab Emirates University)*

15:52 B5L-B.2
Fully-Integrated, High-Efficiency, Multi-Output Charge Pump for High-Density Microstimulators 291-294
Amin Rashidi *(Aarhus University)*; Niloofar Yazdani *(Aarhus University)*; Amir Sodagar *(York University)*

16:14 B5L-B.3
Towards Label-Free Platform for Monitoring Interaction Between Cells and Superparamagnetic Iron Oxide Nanoparticles 295-298
Sonia Abad Tan *(York University)*; Ebrahim Ghafar-Zadeh *(York University)*; Georg Zoidl *(York University)*

16:36 B5L-B.4
A High-Speed Embedded Event Detector for Mobile DNA Sequencing 299-302
Robinson Mittmann *(York University)*; Sebastian Magierowski *(York University)*; Ahmed Refaey *(Manhattan College)*; Ebrahim Ghafar-Zadeh *(York University)*