TEXPO 2021 Participants

Authors/Presenters	Faculty	University	Title	Awards			
				Brian L. Barnes Microsystems Integration	Microsystems Design Award	Industrial Collaboration Award	Excellence in Nano Fabrication
Yunus Dawji	Sebastian Magierowski	York University	A Discrete-Time CMOS Readout Array for High-Speed Portable DNA Sequencing	x	x		
Alexander Leigh	Mitra Mirhassani	University of Windsor	An Efficient Spiking Neuron Hardware System Based on the Hardware-Oriented Modified Izhikevich Neuron (HOMIN) Model		x		
Simon Bellemare	Amine Miled	Université Laval	Design and Conception of a Smart Gigabit Ethernet Switch for Chassis Communication in Hardware-in-a-loop Systems			x	
Gabriel Lachance	Amine Miled	Université Laval	New Spectrometer Design Based on a Grism for the Detection of Neurotransmitters	x	x		
Keven Deslandes	Jean-François Pratee	Université de Sherbrooke	Development and Characterization of a Custom Large-Scale Silicon Interposer Technology for Particle Physics Experiments		x	x	
Hamed Osouli Tabrizi	Ebrahim Ghafar-Zadeh	York University	A Novel Evaporating Droplet-Based Capacitive Biosensor for Creating a Unique 3D Fingerprint of Chemical Analytes	x	x		
Mathieu Gratuze	Frédéric Nabki	École de Technologie Supérieure	Pulse Shaping Using Nonlinear Piezoelectric Ultrasonic Transducers		x		
Rahul Gulve	Roman Genov	University of Toronto	Energy-efficient Coded-Exposure-Pixel (CEP) Cameras for Accurate Computational Imaging without Motion Artifacts	x	x		
Mahdi Behdani	Rashid Mirzavand	University of Alberta	A Miniaturized Portable Over-the-Air Measurement System for Characterization of 5G Integrated Communication Systems			x	
Mahyar Ghavami	Roger Zemp	University of Alberta	Fabrication of Novel Realistic Capacitive Micromachined Ultrasonic Transducer (CMUT) Arrays for Medical Imaging and Therapeutic Applications				x
Seyed Mohammad Noghabaei	Yvon Savaria	Polytechnique Montreal	High-Efficiency Ultra-Low-Power Integrated RF Energy Harvesting for IoT, Wearable Devices and Biomedical Applications	x			

Authors/Presenters	Faculty	University	Title	Brian L. Barge Award for Microsystems Integration	Micro- and Nano-systems Design Award	Industrial Collaboration Award	Excellence in Fabrication
Nedal Al Taradeh	Hassan Maher	Université de Sherbrooke	Design, Fabrication, and Characterization of Normally off GaN-based Vertical FinFET Power Transistor				x
Calvin Love	Arezoo Emadi	University of Windsor	Chemiresistive Material Tester		x		
Laurent Chiasson-Poirier	Julien Sylvestre	Université de Sherbrooke	Integrating processing and sensing in MEMS for biomechanical analysis	x			x
Dorra Bahloul	Ammar Kouki	École de Technologie Supérieure	MEMS-on-LTCC capacitive RF switch	x			x
Andre Lafreniere	Carlos Christoffersen	Lakehead University	Compact MRgHIFU Phased Array System Integration	x	x		
Amit Gour	Frédéric Nabki	École de Technologie Supérieure	A Chip-Scale High Speed Rotary Polygon Micro-scanner for Beam Steering Application				x
Amir Raeesi	Safieddin Safavi-Naeini	University of Waterloo	A Fully Passive Phased-Array Antenna Module for Hybrid Approach-Based Large-Scale Phased-Array Antenna Systems	x		x	
Jonathan Bouchard	Réjean Fontaine	Université de Sherbrooke	Hardware System Design of the Ultra-High Resolution Brain Positron Emission Tomography Scanner	x		x	