



Besançon, May 14-15, 2018



Conference Program

Day 1	
08h30	Registration
09h15	Welcome speech (M. SCHAUSS, Vice President, Enseignement Supérieur et Recherche, Grand Besançon)
09h30	Conference opening (chair and co-chairs)
Session 1 (chairs: N. BOUHADDI / M. RAKOTONDRABE)	
09h45	Invited 1: <b>An NGUYEN-DINH</b> , VERMON & CAIRDAC Powering autonomous sensors and therapeutic medical implants with miniaturized piezoelectric energy harvesting devices
10h25	Invited 2: <b>Antoine FERREIRA</b> , PRISME Laboratory, INSA Centre Val de Loire Energy harvesting for locomotion of micro and nano robotics in medical applications
11h05	Coffe Break
Session 2 (chairs: N. KACEM / M. BARTHES)	
11h30	Talk 1: <b>Luis Fonseca</b> , Inci Donmez, Marc Dolcet, Andrej Stranz, Marc Salleras, Gerard Gadea, Mercè Pacios, Alex Morata, Albert Tarancón Research on thermoelectric microgenerators based on Si and SiGe nanowires as thermoelectric material
11h50	Talk 2: <b>Thomas Huguet</b> , Adrien Badel, Olivier Druet, Mickaël Lallart Significant enhancement of bistable energy harvesters bandwidth: subharmonic orbits and their stability robustness
12h10	Talk 3: <b>Adrien Morel</b> , Adrien Badel, pierre gasnier, David Gibus, Gaël Pillonnet Short Circuit Synchronized Electric Charge Extraction (SC-SECE): a tunable interface for wideband vibration energy harvesting
12h30	Lunch
Session 3 (chairs: F. LANZETTA / A. BARTASYTE)	
14h00	Invited 3: <b>Fabien FORMOSA</b> , SYMME Laboratory, Université Savoie Mont-Blanc A story about micro-Stirling design and fabrication
14h40	Invited 4: <b>Luis ORTIZ</b> , CEDRAT TECHNOLOGIES From Amplified Piezoelectric Actuators to high performance & resistant piezo harvester
15h20	Talk 4: <b>Andrea Pietrelli</b> , Bruno Allard, Vincenzo Ferrara, François BURET, Nicola Lovecchio Custom measurer board dedicated to MFC
15h40	Talk 5: <b>Julien Le Scornec</b> , Benoit GUIFFARD, Raynald SEVENO, Vincent Le Cam Flexible piezoelectric micro-generator with interdigitated electrodes for energy harvesting
16h00	Coffe break
Session 4 (chairs: N. BOUHADDI / N. KACEM)	
16h25	Talk 6: <b>Rubaiyet Haque</b> , Olivier CHANDRAN, Sébastien LANI, Danick Briand Use of 3D printing to build self-powered triboelectric sensors
16h45	Talk 7: <b>Ahmed Guerine</b> , Abdelkhalak El Hami Dynamic response of wind turbine gear system under uncertainty
17h05	Talk 8: <b>David Gibus</b> , pierre gasnier, Adrien Morel, Sébastien Boisseau, Adrien Badel Modeling and design of highly-coupled piezoelectric energy harvesters for broadband applications
17h25	Coffe break/Poster session/JNRSE Live
19h00	End of day
Day 2	
Session 5 (chairs: N. KACEM / M. BARTHES)	
09h00	Invited 5: <b>Marian WIERCIGROCH</b> , Centre for Applied Dynamics Research, University of Aberdeen Vibrational energy harvesting from complex dynamics of pendula
09h40	Invited 6: <b>Sebastian BADER</b> , Department of Electronics Design, Mid Sweden University Energy harvesting for self-powered sensors in hydraulic motors
10h20	Coffe break
Session 6 (chairs: N. BOUHADDI / M. RAKOTONDRABE)	
10h50	Talk 9: <b>Zakaria Zergoune</b> , Najib Kacem, Jean-Louis Raynaud, Nouredine Bouhaddi Design of broadband nonlinear vibration energy harvester with magnetic coupling
11h10	Talk 10: <b>Saïma Siouane</b> , Slavisa Jovanovic, Etienne Tisserand, Philippe Pouré Towards fault tolerant two-stage DC-DC converters under open-circuit switch fault: an original circuit design approach
11h30	Talk 11: <b>Bogdan Vysotskyi</b> , Denis Aubry, Philippe Gaucher, Xavier Le Roux, Fabien Parrain, Elie Lefeuvre Heartbeat Electrostatic Energy harvesting using Multimodal-shaped springs MEMS and Fractioning Interface Circuit
11h50	Talk 12: <b>Giacomo Clementi</b> , Ausrine BARTASYTE, Bernard DULMET, Samuel MARGUERON Energy Harvesting with lead free LiNbO3
12h10	Talk 13: <b>Mohamad Awad</b> Comparison of Voltage Rectifier for RF Energy Harvesting Designed in FD-SOI 28 nm and BiCMOS 55 nm
12h30	Lunch
Session 7 (chairs: F. LANZETTA / A. BARTASYTE)	
14h00	Invited 7: <b>Paul MURALT</b> , EPFL Piezoelectric energy harvesting with ferroelectric thin films coupled to interdigitated electrodes
14h40	Invited 8: <b>Paul MITCHESON</b> , Imperial College London Wireless power transfer: an alternative to harvesting
15h20	Talk 14: <b>Alpha Dassimou Diallo</b> , Ravinder Chutani, Magali Barthès, Sylvie BEGOT, Sylwester Bargiel, Michel De Labachellerie, François Lanzetta Design and microfabrication of a Microscale-Stirling Engine (M-SE) for low temperature heat recovery
15h40	Talk 15: <b>Dimitri Tainoff</b> , Anais Proud'hom, Sébastien Dufresnes, Sylvain Dumont, Daniel Bourgault, Olivier Bourgeois Thermoelectric nanogenerator networks: a viable source of power for autonomous wireless sensors
16h00	Best presentation and best poster awards
16h20	Conference closing (chair and co-chairs)
16h30	End of conference