| TDM   | Paper / Article Title                                                                 | Author Name                                                                 |
|-------|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| TDM01 | Broadband Vibration Energy Harvesting from Underground Trains for Self-Powered Condition Monitoring | Hailing Fu, Wenzhe Song, Yong Qin, Eric Yeatman                             |
| TDM02 | Multi-Megahertz IPT Systems for Biomedical Devices Applications                        | Nunzio Pucci, Christopher H. Kwan, David C. Yates, Paul D. Mitcheson         |
| TDM03 | Impedance-based finite element modelling of a highly-coupled and pre-stressed piezoelectric energy harvester | Yang Kuang, Meiling Zhu                                                    |
| TDM04 | Design and Modelling of Class EF Inverters for Wireless Power Transfer Applications    | Ioannis Nikiforidis, Juan M. Arteaga, Christopher H. Kwan, David C. Yates, Paul D. Mitcheson |
| TDM05 | Prototyping of Power Supply for Vibration Condition Monitoring Modules using a Magnetostrictive Vibration Energy Harvester | Masahiko ITO, Hidenori Katsumura                                           |
| TDM06 | Inherently Broadband-Resonant Mechanism for Vibration Energy Harvesting: A First Proof-of-Concept Experimental Validation | Y. Jia, G. Moubarak, Y. Shi, S.J. Ponnudurai and M. Jackson                |
| TDM07 | Conducting polymer electrodes in electrochemical cells for waste heat harvesting      | Qingshuo Wei, Masakazu Mukaida, Kazuhiro Kirihara, Shohei Horike            |
| TDM08 | Size optimization of metamaterial structure for elastic layer of a piezoelectric vibration energy harvester | Ryo Ichige, Nobuaki Kuriyama, Yohei Umino, Takuya Tsukamoto, Kotaro Hashikura, Kou Yamada, Takaaki Suzuki |
| TDM09 | Thermoelectric Energy Harvesting Materials and Applicative Issues for Powering IoT Sensors and Devices | Takao Mori                                                                 |
| TDM10 | Characterization of Aluminum Nitride (AlN) Photonic Modulator as Function of High Voltage from Textile Triboelectric Nanogenerator (TENG) | Bowei Dong, Qiongfeng Shi, Tianyi He, Chengkuo Lee                        |
| TDM11 | Bio-Mimetic Flexible Wearable Interface with Spider-Net Coding Based On Self-Powered Triboelectric Mechanism | Qiongfeng Shi, Chengkuo Lee                                                |
| TDM12 | Multi-Functional Human-Machine Interface (HMI) Using Flexible Wearable Triboelectric Nanogenerator for Diversified Interacting Applications | Qiongfeng Shi, Zixuan Zhang, Chengkuo Lee                                  |
| TDM13 | Spherical Wave Power Generator with Origami-structured Double-helix Multifold Electrets | Hiping Yi                                                                  |
| TDM14 | Prospects of Electromagnetic Energy Harvesting In a Combined Structure of Broadband Metamaterial Absorber With a Magnetic Tunnel Junction Having Tunnel Magneto-Seebeck Effect | G. Demin, N. Djuzhev, R. Andrushin, T. Ryndina, A. Dedkova, A. Smirnov and P. Znatkov |
| TDM15 | High Performance, Nonlinear Piezoelectric MEMS Energy Harvesting from Low-threshold Mechanical Vibrations | Nadeem Tariq Beigh, Pranay Singh Azad, Prem Parkash, Dhiman Mallick |
| TDM16 | Effect of Impurity/Humidity on Liquid-Crystal-Enhanced Electret Vibration Energy Harvester | Kasidis Kittipaisalsilpa, Takashi Kato and, Yuji Suzuki |
| TDM17 | Calendar Life of Textile Supercapacitors | Nicholas Hillier, Sheng Yong, Steve Beeby |
| TDM18 | Position Independent Wearable 6.78 MHz Near-Field Radiative Wireless Power Transfer using Electrically-Small Embroidered Textile Coils | Mahmoud Wagih; Abiodun O. Komolafe; Bahareh Zaghari |
| TDM19 | Characterizing and Modelling Non-Linear Rectifiers for RF Energy Harvesting | Mahmoud Wagih; Alex S. Weddell; Steve Beeby |
| TDM20 | 13.56 MHz Mixed Mode Rectifier Circuit for Implantable Medical Devices | Yasemin Engür, Hasan Uluşan, Halil Andaç Yiğit, Salar Chamanian, Haluk Külah |
| TDM21 | Energy Harvesting from Kinetics of Prosthetic Leg | J. Pu, Y. Shi, Y. Jia |
| TDM22 | A minimal volume hermetic packaging design for high energy density micro energy systems | X. Yue, J. Grzyb, A. Padmanacha, J.H. Pikul |
| TDM23 | Vibration Energy Harvesting for Information Transmission on Offshore Wind Turbine Blade | Tao Wen, Yu Shi, Yu Jia |
| TDM24 | An EPM-based Variable Stiffness Oscillator for Vibration Energy Harvesting | Takara Kosaka, Arata Masuda |
| TDM25 | Modeling and Analysis of a Piezoelectric Stick-slip Energy Harvester | K. Nakamura, A. Masuda, C. Sawai |
| TDM26 | Improved Performance of Wideband MEMS Electromagnetic Vibration Energy Harvesters using Patterned Micro-magnet Arrays | Kankana Paul, Dhiman Mallick, Saibal Roy |
| TDM27 | Performance Modeling and Design of High Energy Density Microbatteries | Alissa C. Johnson, Ryan Kohlmeyer, Mehmet N. Ates, Chadd Kiggins, Xiujun Yue, John B. Cook, James H. Pikul |
| TDM28 | Piezoceramic Electrodynamic Wireless Power Receiver Using Torsion Mode Meandering Suspension | M. A. Halim, J. M. Samman, S. E. Smith, D. P. Arnold |
| TDM29 | MEMS Energy Harvester Utilizing a Multi-pole Magnet and a High-aspect-ratio Array Coil for Low Frequency Vibrations | D. Han, M. Kine, T. Shinshi, S. Kadota |
| TDM30 | An Efficient Electromagnetic Wind Energy Harvester for Self-powered Wireless Sensor Node | Yan Fang, Yunfei Li, Manjuan Huang, Huicong Liu*, Tao Chen, Gang Tang, Lining Sun |
| TDM31 | Nonlinearities influences on performances of a strongly-coupled piezoelectric generator for broadband vibration energy harvesting | David Gibus, Pierre Gasnier, Adrien Morel, Sébastien Boisseau, Adrien Badel |
|-------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| TDM32 | Shaped coil-core design for inductive energy collectors | M. E. Kiziroglou, S.W. Wright and E. M. Yeatman |
| TDM33 | CuAg electrode for creatinine microfluidic fuel cell based self-powered electrochemical sensor. | M. García-Barajas, A.M. Trejo-Dominguez, J. Ledesma-García, L.G. Arriaga, L. Álvarez Contreras, J. Galindo-de-la-Rosa, N. Arjona and M. Guerra-Balcázar |
| TDM34 | Effect of Natural Frequency of Rotational Electret Energy Harvester for Human Walking | Tomoya Miyoshi, Yuki Tanaka, and Yuji Suzuki |
| TDM35 | Design and Fabrication of a Cylindrical Intracardiac Electret Energy Harvester for Leadless Pacemakers | Chia-Chun Hsieh and Yi Chiu |
| TDM36 | Optimal energy management of two stage energy distribution systems using clustering algorithm | Akshayaa Y.S. Pandian; Michail E. Kiziroglou; David E. Boyle; Steven W. Wright; Eric M. Yeatman |
| TDM37 | Understanding far field ultrasonic power transmission for automobile sensor network in free space | Akshayaa Y.S. Pandiyan; Roberto La Rosa; Michaił E. Kiziroglou; Eric M. Yeatman |
| TDM38 | Current-Enhanced Self-Sustainable Wearable Triboelectric Textile System for Healthcare Monitoring and Rehabilitation Applications | Tianyi He, Hao Wang, Chengkuo Lee |
| TDM39 | A switchable fabric-trioboelectric nanogenerators (SF-TENGs) profile sensing application | Hao Wang, Shuting Liu, Tianyi He, Shurong Dong, Chengkuo Lee |
| TDM40 | Formation of a field emission array for the efficient conversion of electron energy into X-ray radiation for the maskless X-ray lithography | I. D. Evsikov, G. D. Demin, P. Yu. Glagolev, N. A. Djuzhev, M. A. Makhiboroda, N. I. Chkhalo, N. N. Salashchenko, A. G. Kolosko, E. O. Popov |
| TDM41? | Micro-powered rubidium vapor MEMS cell for cold atom spectroscopy | Pawel Knapkiewicz, Tomasz Grzebyk, Jan Dziuban |
| TDM42 | PDMS-encapsualted supercapacitor with an electrolyte being a liquid | P. Śliwiński, K. Laszczyk, B. Kozakiewicz |
| TDM43 | Enhancement of Output Power in Self-Assembled Electret-Based Vibrational Energy Generator: Control of Molecular Orientation by Changing Deposition Rate | Yuya Tanaka, Noritaka Matsuura, Hisao Ishii |
| TDM44 | Stability improvement against light irradiation by dye doping in self-assembled electret-based vibrational energy harvester | Noritaka Matsuura, Hisao Ishii, Yuya Tanaka |
| Paper ID | Title                                                                 | Authors                                                                                           |
|---------|----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| TDM45   | MEMS ION SOURCES FOR SPECTROSCOPIC IDENTIFICATION OF GASEOUS AND LIQUID SAMPLES | Tomasz Grzebyk, Monika Bigos, Anna Górecka-Drzazga, Jan Dziuban, Dihan Hasan, Chengkuo Lee        |
| TDM46   | Energy Harvesting from Non-Stational Environmental Vibrations using a Voltage-Boost Rectifier Circuit | Yukiya Tohyama, Hiroaki Honma, Noboru Ishihara, Hidehiko Sekiya, Hiroshi Toshiyoshi, Daisuke Yamane |
| TDM47   | Thermionic Energy Conversion: Fundamentals and Recent Progress Enabled by Nanotechnology | Alireza Nojeh                                                                                   |
| TDM48   | Towards portable MEMS mass spectrometer                               | P. Szyszka, T. Grzebyk, M. Bialas, A. Górecka-Drzazga, J. A. Dziuban, D. Hasan, Ch. Lee            |
| TDM49   | Feasibility Study of High-Voltage Ion Mobility for Gas Identification Based on Triboelectric Power Source | Dihan Hasan, Jianxiong Zhu, Hao Wang, Othman Bin Sulaiman, Mahmut Sami Yazici, Tomasz Grzebyk, Rafal D. Walczak, Jan A Dziuban, Chengkuo Lee |
| TDM50   | Lab-on-chip platform as a nanosatellite payload solution for biomedical experiments in outer space | Agnieszka Podwin, Adrianna Graja, Dawid Przystupski, Danylo Lizanets, Patrycja Śniadek, Rafał Walczak, Jan A Dziuban |
| TDM51   | Inkjet 3D printed vibrational energy harvester                          | Bartosz Kawa, Krzysztof Śliwa, Rafał Walczak, Vincent C. Lee                                    |
| TDM52   | Modelling and Characterization of a High-Efficiency, Cm-Scale and Low Velocity Airflow-Driven Harvester for Autonomous Wireless Sensor Nodes | P. Gasnier, B. Alessandri, T. Fayer, N. Garraud, E. Pauliac-Vaujour, S. Boisseau                    |
| TDM53   | A versatile Through-Metal-Wall Acoustic Power and Data Transfer Solution | O. Freychet, S. Boisseau, F. Frassati, V. Josselin, P. Gasnier, N. Garraud, R. Gehier, D. Gibus, S. Brulais, G. Despesse |
| TDM54   | Mechanical energy harvesting through a novel flexible contact-separation mode triboelectric nanogenerator based on metallized porous PDMS and Parylene-C | M. Mariello, E. Scarpa, L. Algieri, F. Guido, V. M. Mastronardi, A. Qualtieri, M. De Vittorio       |
| TDM55   | Energy Harvesting from Triboelectric Nanogenerator attached Inside Rolling Tire | H. Tani, M. Sugimoto, K. Fushihara, Y. Nakao, R. Renguo, S. Koganezawa, N. Tagawa                  |
| TDM56   | Towards Integrated Flexible Energy Harvester and Supercapacitor for Self-powered Wearable Sensors | A. Vyas, Q. Li, R. van den Eeckhoudt, G. Geréd, A. Smith, C. Rusu, P. Lundgren, P. Enoksson        |
| TDM57   | Synthesis and thermoelectric properties of Cu1.8S                      | Paweł Nieroda, Anna Kusior                                                                       |
| TDM58   | Low-Cost, Fully 3D-Printed, Magnetically Actuated, Miniature Valve-less | Anthony P Taylor and Luis Fernando Velásquez-Garcia                                              |
| TDM59 | DESIGN AND IMPLEMENTATION OF AN OPAMP BASED INTERFACE CIRCUIT FOR IMPROVING THE OUTPUT POWER OF FREQUENCY UP CONVERSION PIEZOELECTRIC ENERGY HARVESTER | Qifan Gao, Ling Bu, Sixing Xu, Xiaohong Wang |
|-------|--------------------------------------------------------------------------------|---------------------------------------------|
| TDM60 | Complex methodology for studying the emission properties of multi-tip field cathodes with online data processing | E.O. Popov, S.V. Filippov, A.G. Kolosko |
| TDM61 | Low-Cost, Rugged Microfluidics via Silver Clay Extrusion | Emmanuel Segura-Cardenas and Luis Fernando Velásquez-Garcia |
| TDM62 | Improved charge stability in PTFE coatings for PDMS ferroelectrets | Mingming Zhang, Junjie Shi and Stephen Beeby |
| TDM63 | Thermal energy harvesting through the fur of endothermic animals | Eiko Bäumker, Pascal Beck, Peter Woias |
| TDM64 | The Centrifugal Softening Effect of an Inverse Nonlinear Energy Harvester in Low-frequency Rotational Motion for Enhancing Performance | Xutao Mei, Shengxi Zhou, Bo Yang, Tsutomu Kaizuka, Kimihiko Nakano |
| TDM65 | Convection-effect-enhanced Thin Metal Thermoelectric Module Directly-heated by Catalytic Combustion | Junjie Peng, Minhyeok Lee, Yong Fan, Atsushi Yamamoto, Yuji Suzuki |
| TDM66 | Hybrid polymer/piezoelectric oxide bilayer films for low frequency energy harvesting | J. Le Scornec, B. Guiffard, R. Seveno, V. Le Cam |
| TDM67 | Rolling Mass for Wide Bandwidth Vibration Energy Harvesting | Angela Porcar-Climent & Nathan Jackson |
| TDM68 | Bistable PiezoMEMS Energy Harvester with varying Magnetic Configurations | Nathan Jackson |
| TDM69 | Low temperature growth of piezoelectric AlN films by plasma enhanced atomic layer deposition and magnetoelectric coupling with nickel for energy harvesting applications | Tai Nguyen, Noureddine Adjeroud, Sebastjan Glinsek, Jérôme Guillot, Jérôme Polesel Maris |
| TDM70 | Origami Heat Radiation Fin for Stretchable Thermoelectric Generator | Momoe Akuto, Kana Fukuie, Eiji Iwase |
| TDM71 | Synthesis and thermoelectric properties of Cu1.8S | Paweł Nieroda, Anna Kusior |
| TDM72 | Vibration-powered pressure sensor | Bao Quoc Ta, Einar Halvorsen |
| TDM73 | Energy Harvesting from Triboelectric Nanogenerator Attached Inside Rolling Tire | H. Tani, M. Sugimoto, K. Fushihiara, Y. Nakao, R. Renguo, S. Koganezawa, N. Tagawa |
| TDM74 | Thermal Insulation Design of Portable Radioisotope Electrical Generators | Xiawa Wang, Walker Chan, Peter Fisher, Renrong Liang, Jun Xu |
| TDM75 | Self-Powered Vibration Analyser | Miklós Szappanos, János Radó, Péter Harmat, János Volk |
| TDM76 | Improving a self-powered glucose biosensor system using a microfluidic design | R.A. Escalona-Villalpando, A. Sandoval-Garcia, S. D. Minteer, L.G. Arriaga, J. Ledesma-Garcia |
| TDM77 | Additively Manufactured, Miniature Multi-Emitter Ionic Wind Pumps | Zhumei Sun and Luis Fernando Velásquez-García |
| TDM78 | All-Direction In-Plane Magnetic Repulsion-Based Self-Powered Arbitrary Motion Sensor and Hybrid Nanogenerator | Trilochan Bhatta, Pukar Majarjan and Jae Y. Park |
| TDM79 | PDMS-ZNO COMPOSITE TEXTILE FERROELECTRET FOR HUMAN BODY ENERGY HARVESTING | Junjie Shi |
| TDM80 | A Flapping Airflow Energy Harvester with Flexible Wing Sections | Liuqing Wang, Dibin Zhu |
| TDM81 | Optimization of a Magnetodynamic Receiver for Versatile Low-Frequency Wireless Power Transfer | N. Garraud, B. Alessandri, P. Gasnier, D. Arnold, S. Boisseau |
| TDM82 | AC/DC power conversion improvement of rotational electromagnetic energy harvesting using piezoelectric elements for active rectification | Giulia Lombardi, Mickaël Lallart, Michaël Kiziroglou, Eric M. Yeatman |
| TDM83 | Features of evaluating properties of field emitters using effective parameters | A.G. Kolosko, S.V. Filippov, M.A. Chumak, E.O. Popov, G.D. Demin, I.D. Eviskov, N.A. Djuzhev |
| TDM84 | Towards the unification of material-level and system-level approaches: nonlinear characterization of hard and soft-PZT vibration energy harvesters | Alexis Brenes, Dae Su Kim, Elie Lefevre, Namsu Kim, Hyung-Won Kang, Chan-Sei Yoo, Chae Il Cheon, Seung Ho Han |
| TDM85 | Aluminum nitride based piezoelectric harvesters | I. Gablech, J. Klempa, J. Pekárek, P. Vyroubal, J. Kunz, P. Neužil |
| TDM86 | Light harvesting and charge transfer in metal oxide nanomaterials for hydrogen energy generation | K. Zakrzewska, A. Kusior, M. Radecka |
| TDM87 | Unstable charge-pump for signal rectification of sliding tribo-electret generators with interdigitated grating electrodes | Naida Hodzic, Dimitri Galayko, Sang-Woo Kim, Philippe Basset |
| TDM88 | Copper selenide as a promising semiconductor for thermoelectric conversion | Anna Kusior, Paweł Nieroda |
| TDM89 | Investigation of the Liquid Plug Friction Force in the Self-Oscillating Fluidic Heat Engine (SOFHE) | A. Nikkhah, A. Tessier-Poirier, N. Karami, O. Abouali, L.G. Frechette |
| TDM90 | Three terminal piezoelectric energy harvester based on novel MPPT design | N. Panayanthatta, L. Montés, E. Bano, C. Trigona, R. La Rosa |
| TDM91 | Energy harvesting and wireless power transfer in a unified system for wearable devices | Binh Duc Truong, Caleb Roundy, Robert Rantz and Shad Roundy |
| TDM92 | Hybrid-halide perovskite thin films for thermoelectric application | Shrikant SAINI, Akira YONAMINE, Ryoma NISHIO, Izuki MATSUMOTO, Tomohide YABUKI, Koji MIYAZAKI |