

Monday, June 18 - COE'2018

• 9:00 Opening session

Welcome and introduction by the Chair of COE'2018

prof. Jerzy Weremczuk

Welcome by the Dean of the Faculty of Electronics and Information Technology

prof. Krzysztof Zaremba

Word from the President of Polish Sensor Society

prof. Jan Dziuban

15th Anniversary of COE Conferences

prof. Ryszard Jachowicz

Presentation of IEEE

prof. Grzegorz Pankanin

• 10:00 Plenary talk by prof. Takao Mori

Bottom up Nanostructuring and Novel Materials and Concepts to Develop Viable Thermoelectrics

• 11:15 Coffee break

• 11:45 Plenary talk by prof. Chengkuo Lee

Advances in MEMS/NEMS Technologies – From Sensors, Energy Harvesters to Nanophotonics

• 13:00 1st Poster session

1. The Method for Easy Identifying Zero Temperature Drift of Catalytic Bead Sensor

Karol Jabłoński and Tomasz Grychowski

2. Inkjet 3D Printed Venturi Microflowmeter

Krzysztof Adamski, Bartosz Kawa and Rafał Walczak

3. Electron Transparent Anode for MEMS Transmission Electron Microscope

Michał Krysztof, Tomasz Grzebyk, Piotr Szyszka, Karolina Laszczyk, Anna Górecka-Drzazga and Jan Dziuban

4. Mechanical Characterization of Inkjet 3D Printed Microcantilevers

Bartosz Kawa, Krzysztof Adamski, Rafał Walczak and Danylo Lizanets

5. Microsystems for Cell Deformability Measurements

Aleksandra Pokrzywnicka, Danylo Lizanets, Patrycja Śniadek and Rafał Walczak

6. Array of Gas Sensors Based on TiO₂ upon Temperature Modulation

Patryk Gwizdz, Marta Radecka and Katarzyna Zakrzewska

7. Single Sensor Hot-Wire Anemometer Based on Thermal Time Constant Estimation

Eligiusz Pawłowski

8. Technology of Stearine Transfer Using Laser-Heating for Lab-On-Paper Development

Krzysztof Hackiewicz, Jerzy Weremczuk, Artur Dybko and Michał Chudy

9. Determination of Oxygen Saturation Based on Distorted Photoplethysmography Signals by Scaling Method

Adam Naguszewski and Jerzy Weremczuk

10. Evaluation of the Commercial Electrochemical Gas Sensors for the Monitoring of CO in Ambient Air

Grzegorz Jasinski, Marta Dmitrzak and Piotr Jasiński

• 14:00 Lunch

• 15:00 MEMS & biofluidic oral session

From a Microtip to a Planar Cathode - An Electron Source with a Simplified Technology

Karolina Laszczyk, Michał Krysztof, Tomasz Grzebyk, Piotr Szyszka, Anna Górecka-Drzazga and Jan Dziuban

Copper Sulfide Materials for Nonenzymatic Glucose Detection

Anna Kusior

MEMS Nanoleak Gas Injection System

Tomasz Grzebyk and Anna Górecka-Drzazga

Inkjet 3D Printing of Labs-On-A-Chip with Optical Detection

Rafał Walczak

A Concept of MEMS Mass Spectrometer

Piotr Szyszka, Tomasz Grzebyk, Anna Górecka-Drzazga and Jan Dziuban

Tuesday, June 19 - COE'2018

• 9:00 Sponsors session

• 9:30 Chemical sensors oral session

Point Defect Structure and Gas Sensing Properties of V₂O₅ Thin Films Deposited by Rf Reactive Sputtering
Krystyna Schneider

TiO₂/SnO₂ Gas Sensors of H₂

Marta Radecka and Katarzyna Zakrzewska

Wavelet Transform Analysis of Temperature Modulated Gas Sensor Response

Lukasz Wozniak, Pawel Kalinowski, Grzegorz Jasinski and Piotr Jasiński

Gas Sensing Properties of Reduced Graphene Oxide Modified by Copper Oxide

Tadeusz Pisarkiewicz, Wojciech Maziarz, Artur Malolepszy, Leszek Stobiński, Dagmara Michon and Artur Rydosz

Inertial Measurements of Curling Stone Movement

Bartosz Dzikowski, Marek Pachwicewicz and Jerzy Weremczuk

Modeling of Interdigital Electrodes Geometrical Parameters Effects on Chemical Sensor Response

Khalid Dallah, Azzedine Bellel, Omar Lezzar, Salah Sahli and Patrice Raynaud

• 10:00 Coffee break

• 11:30 Optoelectronic sensors oral session

Fabrication and Testing of Smart Refractory for Energy System Monitoring in Harsh-Environments

Edward Sabolsky, Katarzyna Sabolsky, Gunes Yakaboylu and Benjamin Buzzo

OLED Display as a Useful Tool Towards Real-Time On-Chip Photosensitivity Investigation of Microorganisms

Agnieszka Podwin and Danylo Lizanets

Strain Sensor Based on a Long Period Fiber Grating with Dual- Resonance Closed in the Interferometric Structure

Renata Zawisza, Predrag Mikulic, Wojtek J. Bock and Leszek Jaroszewicz

Concept Design: Multi-Sensing System to Prevent Renal Deterioration in Heart Failure Patients

Samah Atiyat and Shadi Karabsheh

Making Power over Fiber Supply of Microelectronic Sensor Devices Simpler

Pawel Zylka and Michal Guzowski

Photonic Crystal Fiber Dynamic Pressure Sensor

Cezary Kaczmarek, Waldemar Wójcik and Muhtar Junisbekov

• 13:00 2nd Poster session

11. Influence of the Square Wave Voltage on Dynamical Properties of a Flat Voltammetric Electrode in the Time Domain by the Electrochemical Reversible Reaction

Krzysztof Suchocki

12. CuO and CuO/TiO₂-y Thin-Film Gas Sensors of H₂ and NO₂

Artur Rydosz, Wojciech Maziarz, Andrzej Brudnik, Adam Czaplą and Katarzyna Zakrzewska

13. Spectral Dependence of the Sensitivity of Polarization Maintaining Optical Fibers to Temperature

Cezary Kaczmarek

14. Microfluidic Chip for Cyclical Continuous-Flow PCR - Preliminary Results of the Technology

Wojciech Kubicki, Maciej Sasowski and Arkadiusz Wala

15. Multianalyte Calibration Methods for Potentiometric Integrated Sensors System for Determination of Ions Concentration in a Body Fluid

Marcin Urbanowicz, Artur Jasiński, Dorota Pijanowska and Maria Bocheńska

16. Mathematical Modeling of LTCC Based Microfluidic Type Chemical Microreactor

Elżbieta Remiszewska, Konrad Dudzinski, Karol Malecha and Dorota Pijanowska

17. Evaluation of Fluorescein as a Label in Electrochemical and Optical Measurements

Agnieszka Paziewska-Nowak, Tomasz Raczynski, Daniel Janczak, Malgorzata Jakubowska and Dorota Pijanowska

18. Skydiver Flight Parameters Recorder

Marek Pachwicewicz, Stanisław Rzewuski and Jerzy Weremczuk

19. Accuracy Estimation of the Sounding Rocket Navigation System

Marek Pachwicewicz and Jerzy Weremczuk

20. Evaluation of the Electronic Nose Used for Monitoring Environmental Pollution

Grzegorz Jasinski, Pawel Kalinowski, Lukasz Wozniak and Piotr Jasiński

• 14:00 Lunch