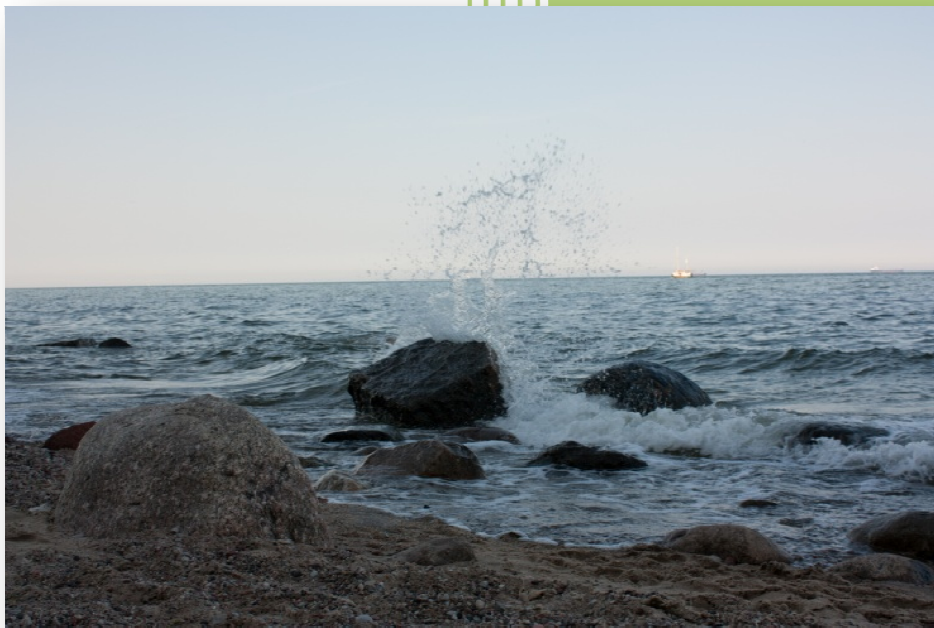


# 2011

## IMAPS - IEEE CPMT Conference Program



September 21 - 24, 2011  
Gdańsk - Sobieszewo



Wednesday 21.09.2011	
From 16:00	Registration
19:00 – 20:00	Dinner
20:00 – 21:30	IMAPS Poland board meeting

Thursday 22.09.2011	
7:30 – 8:45	Breakfast
8:45 – 9:00	Conference opening
9:00 – 9:40	Invited lectures: <u>Wolter K.-J.</u> , Meier K., Saettler P., Panchenko I., Froemmig M., Graf M.- <i>Bonding Technologies for 3D-Packaging</i>
9:40 – 10:20	<u>Schmid U.</u> , Bittner A.- <i>LTCC as Advanced Substrate Material for Miniaturized Devices and Systems</i>
10:20 – 11:00	<u>Arshak K.</u> , Velusamy V., Korostynska O., Adley C.- <i>Study of IDE as a Sensor Head for Interfacing with Handheld Electrochemical Analyzer System</i>
11:00 – 13:00	Coffee break Poster session “Materials, methods and technologies for novel sensors and renewable energy devices” supported by Voivodship Fund for Environmental Protection and Water Management in Gdańsk
13:00 – 14:00	Lunch
14:00 – 19:00	Excursion – Gdańsk Old Town
19:00 – 21:00	Bonfire dinner

Friday 23.09.2011	
7:30 – 9:00	Breakfast
9:00 – 9:40	Invited lectures: <u>Wolny W. W.</u> - <i>Piezoelectric Integrated Devices Based on Thick Film Technology</i>
9:40 – 10:20	<u>Barta M.</u> , Zednicek T.- <i>Tantalum Technologies</i>
10:20 – 11:00	<u>Kisiel R.</u> , Szmidt J., Sochacki M, Guzewicz M.- <i>Overview of SiC Die Assembly Technologies for High Temperature Electronics</i>
11:00 – 13:00	Poster session
13:00 – 14:00	Lunch
14:00 – 14:30	Invited lectures: <u>Smulko J.</u> , Hasse L., Kaczmarek L.- <i>Methods of Varistors Quality Monitoring</i>
14:30 – 15:00	<u>Belous A.</u> , Ovchar O.- <i>Microwave Dielectric Materials with High Quality Factor</i>
15:00 – 15:30	<u>Partsch U.</u> , Mosch S., Ihle M.- <i>Aerosol Printed Co- and Post-Fired Functional Films for LTCC-Multilayer Components</i>
15:30 – 16:00	Coffee break
16:00 – 16:30	Invited lectures: <u>Piasecki T.</u> , Nitsch K., Dziedzic A., Chabowski K., Stęplewski W., Koziol G.- <i>Testing of Passive Elements Embedded in PCB Using Impedance Spectroscopy</i>
16:30 – 17:00	<u>Sedlakova V.</u> , Majzner J., Sedlak P., Kopecky M., Sikula J., Hasse L., Szewczyk A. - <i>Noise and Electro-Ultrasonic Spectroscopy of Conducting Polymer Thick Films</i>
17:00 – 17:30	<u>Nowakowski A.</u> - <i>Research activities at the Department of Biomedical Engineering TUG</i>
17:45 – 19:00	IMAPS Poland general assembly
19:30 – 22:00	Gala dinner

**Saturday 24.09.2011**

<b>7:30 – 9:00</b>	<b>Breakfast</b>
<b>9:00 – 9:30</b>	<u>Grael M., Day B.</u> , <i>Presentation of W.C.Heraeus GmbH, Pfarr Stanztechnik GmbH, Fraunhofer IZM and Grael GmbH</i>
<b>9:30 – 10:00</b>	<b>Invited lectures:</b> <u>Słoma M.</u> , <u>Jakubowska M.</u> , <u>Szałatkiewicz J.</u> - <i>Influence of Electrical Stress on Printed Elastic Resistors with CNTs</i>
<b>10:00 – 10:30</b>	<u>Macherzyński W.</u> , <u>Paszkiwicz B.</u> , <u>Vincze A.</u> , <u>Paszkiwicz R.</u> , <u>Tłaczała M.</u> , <u>Kováč J.</u> - <i>Ohmic Contacts Based on Ti/Al Metallization to n-Type AlGaIn/GaN Heterostructures</i>
<b>10:30 – 11:00</b>	<u>Andriyevsky B.</u> , <u>Patryn A.</u> , <u>Dorywalski K.</u> , <u>Cobet Ch.</u> , <u>Piasecki M.</u> , <u>Kityk I.</u> , <u>Esser N.</u> - <i>Optical Properties of <math>Sr_xBa_{1-x}Nb_2O_6</math> Crystals in UV and VUV Photon Energy Range</i>
<b>11:00– 11:30</b>	<b>Conference closing</b>
<b>11:30 – 12:30</b>	<b>Lunch</b>

# IMAPS - IEEE CPMT

## Poster Sessions Program

THURSDAY 22.09.2011

Poster session "Materials, methods and technologies for novel sensors and renewable energy devices" supported by Voivodship Fund for Environmental Protection and Water Management in Gdańsk

1. Belavic D., Santo Zarnik M., Hrovat M., Holc J., Makarovic K., Dolanc G.- *Thermal Design of LTCC Based Ceramic Microsystem*
2. Czok M., Malecha K., Malawski M., Golonka L.- *LTCC Microfluidic Chip with Fluorescence Based Detection*
3. Dunst K., Molin S., Jasiński P.- *Impedance Spectroscopy as a Diagnostic Tool of Degradation of Solid Oxide Fuel Cells*
4. Dziurdzia B., Magoński Z., Jankowski H., Koprowski J.- *Anode Base Structure for Flat Solid Oxide Fuel Cell (SOFC)*
5. Dziurdzia P., Lichota K.- *A Compact Thermoelectric Harvester for Waste Heat Conversion*
6. Dziurdzia P., Mysiura M., Gołda A.- *A Charge Pump Integrated in 180nm CMOS Technology for Voltage Conversion in Heat Energy Harvesters*
7. Fiedot M., Teterycz H., Halek G., Halek P.- *Synthesis of Tin Dioxide Nanoparticles*
8. Fiedot M., Teterycz H., Halek G., Wiśniewski K.- *Synthesis of Zinc Oxide Nanoballs*
9. Gelmuda W., Kos A.- *Device for Road Holes and Obstacles Detection*
10. Grzesiak W., Bieńkowski A., Piekarski J.- *Application of Dedicated Integrated Circuits in MPPT Systems*
11. Gwiżdż P., Brudnik A., Zakrzewska K.- *Metal – Oxide Sensor Array for Gas Detection*
12. Haigh P., Buckley J., O'Flynn B., Ó'Mathúna C.- *Impact of Non-Optimal Grounding of the CC2420 RFIC on a 802.15.4 Tyndall Sensor Wireless Mote*
13. Hajłasz M., Prażmowska J., Wośko M., Paszkiewicz B., Paszkiewicz R., Tłaczała M.- *AlGaIn/GaN Heterostructure Functionalization with Amine Groups for Biological Sensors*
14. Kita J., Leweling F., Moos R.- *Cylindrical LTCC Substrates for Gas Sensors - First Steps*
15. Maeder T., Jiang B., Vecchio F., Slater C., Farine G., Ryser P.- *Ceramic Hotplates Based on Thick-Film and LTCC Technology*
16. Malecha K., Poniatowski M. J.- *Integration of Optoelectronic Components with LTCC (Low Temperature Co-fired Ceramic) Microfluidic Structure*
17. Markowski P.- *Miniaturized Arms for Three-Dimensional Thick-Film Thermoelectric Microgenerator*
18. Marszałek K., Stapiński T., Swatowska B., Sobkow Z.- *Electrochromic System Supplied by Photovoltaic Source*
19. Maziarz W., Rydosz A., Pisarkiewicz T., Domański K., Grabiec P.- *A Gas Micropreconcentrator for Low Level Acetone Measurements*
20. Mroczkowski M., Cież M., Kalenik J.- *Investigation of Multiple Degradation and Rejuvenation Cycles of Electroluminescent Thick Film Structures*
21. O'Flynn B., Boyle D., Popovici E., Magno M., Brunelli D., Petrioli C.- *GENESI: Wireless Sensor Networks for Structural Monitoring*
22. Oleś D., Teterycz H., Halek P., Suchorska P.- *Synthesis of Gold Nanoparticles*
23. Prażmowska J., Szyszka A., Paszkiewicz R., Tłaczała M.- *Hydrogen Sensing Properties of Palladium and Platinum Thin Films*
24. Prociów E. L., Mazur M., Kaczmarek D., Domaradzki J., Wojcieszak D., Franczyk Ł., Sieradzka K.- *A New Concept of TiO<sub>2</sub>:(V, Ta) Thin Film Gas Sensor*
25. Prociów E. L., Sieradzka K., Domaradzki J., Mazur M., Franczyk Ł., Kaczmarek D.- *Evaluation of TiO<sub>2</sub> Thin Films Doped with Different Dopants for Conductometric Gas Sensors*
26. Rydosz A., Maziarz W.- *Thermal and Power Consumption Measurements in Gas Sensor Array Based on Discrete Gas Sensors in LTCC Technology*
27. Santo Zarnik M., Belavič D., Hodnik M.- *The Effect of Humidity on the Stability of LTCC Pressure Sensors*
28. Strzelczyk A., Jasiński G., Jasiński P., Chachulski B.- *Electrocatalytic Sensor Based on Nasion with Auxiliary Layer*
29. Swatowska B., Stańco A., Panek P.- *Mechanisms of Silicon Solar Cells Degradation*
30. Szczepański Z., Borecki M., Szmigiel D., Korwin Pawłowski M. L.- *Design and Realization of a Microfluidic Capillary Sensor Based on a Silicon Structure and Disposable Optrodes*
31. Tadaszak R. J., Łukowiak A., Golonka L. J.- *Optical Ph Sensor Based on LTCC and Sol-Gel Technologies*
32. Zborowska-Lindert I., Ściana B., Pucicki D., Radziejewicz D., Boratyński B., Tłaczała M.- *Comparison of GaAsN/GaAs and InGaAsN/GaAs MSM Photodetectors Made by MOVPE Technology*

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**FRIDAY 23.09.2011****Poster session**

1. **Atassi I., Maric A., Blaz N., Radosavljevic G., Zivanov L., Smetana W.**- *Ferrite LTCC Complex Permeability Dependence on Processing Parameters and Environment Temperature*
  2. **Borecki J.**- *Investigation of Leaded Assembly Process of Lead-Free BGA and CSP Structures*
  3. **Boroń K., Kos A.**- *Model of Thermal Touch Screen for the Blind*
  4. **Dabrowski A., Matkowski P., Golonka L.**- *Fatigue Strength Testing of LTCC and Alumina Ceramics Bonds*
  5. **Jakubowska M., Młóżniak A., Słoma M.**- *Thick Film Screenprintable Polymer Pastes Based on Graphene Nanoplatelets – Preliminary Results*
  6. **Jankowski K., Felba J., Małeckı K., Tesarski S. J., Urbański K., Wymysłowski A.**- *Thermo-Mechanical Analysis of Crosslinked Polymers – Parametric and Multi-Scale Molecular Approach*
  7. **Jankowski K., Felba J., Małeckı K., Urbański K., Wymysłowski A.**- *A Design of Innovative Failure and Reliability Investigation System for Accelerated Thermal Cycling Tests of Solder and Adhesive Joints*
  8. **Jasiński G.**- *System Setup and Software for Cyclic Voltammetry Measurements*
  9. **Jurków D., Golonka L.**- *Preliminary Investigations of High GF Thick Film Resistors Deposited on Various LTCC Substrates*
  10. **Kisiel R., Szczepański Z., Firek P., Guziewicz M., Krajewski A.**- *Mechanical and Thermal Properties of SiC - Ceramics Substrate Interface*
  11. **Klimiec E., Zaraska W., Kuczyński Sz.**- *Dynamic Research of Foot Pressure Distribution – the Four-Points Shoe Insert with PVDF Sensors*
  12. **Kłossowicz A., Dziedzic A., Winiarski P., Stęplewski W., Koziół G.**- *Analysis of Pulse Durability of Thin-Film and Polymer Thick-Film Resistors Embedded in Printed Circuit boards*
  13. **Kobierowska K., Karpińska M., Molin S., Jasiński P.**- *Oxide Layers Fabricated by Spray Pyrolysis on Metallic Surfaces*
  14. **Kosikowski M., Suszyński Z.**- *Method of Processing of Thermal Images Recorded in the Beam Displacement Modulation Technique*
  15. **Kowalik P., Pruszowski Z.**- *Hybrid Resistive Layers Ni-Cr+Ni-P for Obtaining Precision Resistors*
  16. **Kruczkowski M., Jędrzejewska-Szczerska M., Gnyba M.**- *HCT Sensor Using Low-Coherence Interferometry*
  17. **Kulawik J., Szwagierczak D.**- *Fabrication and Properties of Multilayer Capacitors with Multicomponent Ferroelectric Dielectric*
  18. **Kulawik J., Szwagierczak D., Guzdek P.**- *Multiferroic Multilayer Composites Made in LTCC Technology Based on  $Pb(Fe_{1/2}Nb_{1/2})O_3$  Relaxor and  $CoFe_2O_4$  Ferrite*
  19. **Majzner J., Sedlak P., Sedlakova V., Sikula J.**- *Noise in Piezoelectric Ceramics at the Temperatures 10K-270K*
  20. **Nowak D., Janiak M., Dziedzic A., Piasecki T.**- *High Temperature Properties of Thick-Film and LTCC Components*
  21. **Ortolino D., Kita J., Wurm R., Blum E., Beart K., Moos R.**- *Investigation of Non-Symmetric Contacting and Voids in Electrical Vias Produced in Hybrid Thick-Film Technology*
  22. **Patryn A., Dorosz J., Ceynowa P., Bychto L.**- *Optical Coupling Block for Discrete Pseudomonochromator*
  23. **Sabat W., Klepacki D., Kalita W., Slosarčík S., Jurčíšin M., Cabúk P.**- *EMC Aspects in Microelectronics Structures Made in LTCC Technology*
  24. **Sabat W., Klepacki D., Kamuda K.**- *Analysis of Electromagnetic Couplings in Hybrid Circuit Made on Austenitic Metal Substrate*
  25. **Sedlak P., Tofel P., Sedlakova V., Majzner J., Sikula J., Hasse L.**- *Ultrasonic Spectroscopy of Silicon Single Crystal*
  26. **Sitek J., Futera K., Belavič D., Santo Zarnik M., Kościelski M., Bukat K., Janeczek K., Kuščer Hrovatin D., Jakubowska M.**- *An Investigation of the Conductive Lines Quality Deposited by Inkjet Printing on Different Substrates*
  27. **Stadler A. W.**- *Virtual Instruments in Low-Frequency Noise Spectroscopy Experiments*
  28. **Stadler A. W., Kolek A., Zawiślak Z., Jakubowska M., Słoma M.**- *Low-Frequency Noise Spectroscopy Studies in CNT/Polymer Thick-Film Resistors*
  29. **Stęplewski W., Serzysko T., Koziół G., Janeczek K., Dziedzic A.**- *Investigations of Passive Components Embedded in Printed Circuit Boards*
  30. **Tadaszak K., Nitsch K., Piasecki T., Posadowski W. M.**- *Properties of Aluminium Oxide Thin Films Deposited in High Effective Reactive Pulsed Magnetron Sputtering Process*
  31. **Wierzba P., Łoziński A.**- *Characterization of PLZT Thin Films for Fast Electro-Optical Sampling Circuits*
  32. **Winiarski P., Dziedzic A., Kłossowicz A., Stęplewski W., Koziół G.**- *Analysis of Long-Term Stability of Thin-Film and Polymer Thick-Film Resistors Embedded in Printed Circuit Boards*
  33. **Wośko M., Paszkiewicz R., Paszkiewicz B., Tłaczała M.**- *Modeling of AlGaIn/GaN Heterostructures by APSYS Software*
  34. **Zhang Y., Wang S., Ma S., Hu Z., Liu J., Sitek J., Janeczek K.**- *Numerical Study of the Interface Heat Transfer Characteristics of Micro-Cooler with CNT Structures*
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