

Special session (*Monday, Sep. 19*)



Time	Name	Oral	Titel	
9:40	Nakanishi		Research Review of the 21st Century Center of Excellence, Shizuoka University – Research and Education Center of Nanovision Science -	Key note lecture
10:20	Rogachev		Educational Institution "The Gomel State University named after Francisk Skorina"	Key note lecture

Session Chairman: J. Engemann

Important note:

Posters are indicated in the first column with a "P" and a consecutive number instead of a time. You are requested to place your poster on Monday. The place for your poster is indicated with the same number on the movable walls. The Poster Session is on Tuesday, Sep. 20 between 13:20 and 15:00 o'clock. No lecture sessions will be taking place during that time and the presenting author(s) should attend his booth throughout. The posters can be visited after the session all the time.

Technologies, Fabrication Processes (*Monday, Sep. 19*)

Time	Name	Oral	Poster	Title	
11:20	Jablonski			Nanometrology in nanotechnology	Key note lecture
12:00	Dabrowski	X		Experimental Investigations of New Hybrid Process Electrochemical Machining with Abrasive Flow Machining (ECAFM)	
13:20	Kudla	X		Machining of mirror-like surfaces using cutting techniques	
13:40	Lewenstein	X		Cooperation of the university and the small firm – a family of computer controlled infusion pumps	
14:00	Nowicki	X		Investigation of electro discharge dressing of ultra-hard abrasive tools with brush electrode	
14:20	Sakai	X		Minimum quantity of lubrication using gelated liquid mist for turning process	
14:40	Shizuka	X		Study on End Milling Characteristics under a Nitrogen Atmosphere	
P1	Dabrowski		X	Ultrasonic Vibration with Electro Discharge Machining (EDM)	
P2	Nowicki		X	Investigation of electro discharge alloying with monolithic electrodes	

Session Chairman: M. Kando

Time	Name	Oral	Poster	Title	
15:20	Kawahito			An ultimate dynamic range imaging device – from star light to sun light	Key note lecture
16:00	Aoyama	X		An Integrated Active Magnetic Probe for High-Frequency Electromagnetic Emissions	
16:20	Mieno	X		Efficient Mass-Production of Fullerenes and Carbon Nanotubes by the JxB Arc Discharge Method	
16:40	Miyagawa	X		Numerical simulation of characteristic of paper based friction material in engagement	
17:00	Takahashi	X		Automatic modelling of calculation processes of simulators for film deposition using software agent	
P3	Dabrowski		X	Theoretical Analysis of Electric Field Distribution in PM-EDM-Process	
P4	Hashimoto		X	A Proposal of Color Edge Detection Method for Image Retrieval by Sketches	
P5	Hashimoto		X	A Proposal of Long Distance and Precise Position Measurement Method	
P6	Takahashi		X	Automatic modelling system for reaction mechanisms using a novel calculation method based on evolutionary computing	

Session Chairman: R. Jablonski

Fundamentals and Applications of Technical Plasmas (*Tuesday, Sep. 20*)



Time	Name	Oral	Poster	Title	
9:00	Theirich			Some general remarks about the scaling of plasma processes – physical and engineering aspects	Key note lecture
9:40	Kando	X		Luminous efficacy of compact high-pressure microwave discharge lamps	
10:00	Leu	X		Diagnostics and modelling of reactive plasmas	
10:20	Mesko	X		Growth of Carbon Nanotubes on Nano-sized Catalyst Using Thermal and Microwave Plasma CVD	
11:00	Nagatsu	X		Development of Large-Volume Microwave Plasma Device for Low-Temperature Medical Sterilization	
11:20	Nagatsu	X		Characteristics of Surface-wave and volume-wave Plasma Excited with Internally Mounted Planar Microwave Launcher	
11:40	Ogino	X		Effect on Ion Bombardment Energy on Characteristics of a-C Film Deposited on Polymer Sheet Using Surface-wave Plasma	
12:00	Sirghi	X		Heating of Polymer Substrate by Interaction with Plasma in Radio Frequency Magnetron Sputtering Deposition	
P7	Chiper		X	On the peak current of a glow mode barrier discharge	
P8	Eto		X	Comparison of carbon nano-tube production produced in C ₂ /H ₂ /H ₂ and CH ₄ /H ₂ microwave plasmas	
P9	Kanai		X	Optical emission spectroscopy of atmospheric torch plasma produced by microwave	
P10	Lupu		X	Numerical and theoretical investigations of floating-sheath formation	
P11	Ogino		X	Field Emission Characteristics of Nano-crystalline Diamond Films Prepared with Ar/H ₂ /CH ₄ Microwave Plasma CVD	
P12	Seergeev		X	Characterization of Plasma Surface Modifications on Polypropylene by use of Scanning Probe Microscopy	
P13	Teodoru		X	Time-independent theory and simulation results for a collisional plasma-wall-transition (PWT) in presence of fast electrons	

Session Chairman: J. Engemann

Time	Name	Oral	Poster	Title	
9:00	Schwabe-dissen	X		The Low Temperature Plasma Sterilization: an overview	Key note lecture
9:40	Kanamori	X		Development of Novel Cell Separation System Using Poly(N-isopropylacrylamide)-graft-polypropylene Non-woven Membrane with Antibody	
10:00	Minakata	X		Bio-FET Photosensor using Photosynthetic Protein PSI	
10:20	Yamashita	X		Research and Development of Novel Sugar Dendritic MRI Contrast Agents for Imaging Blood Vessels and Tumors	
P14	Nagatsu		X	Sterilization Characteristics of Low-pressure CW and Pulse-modulated Surface-wave Plasmas with Oxygen and Nitrogen Gases	

Session Chairman: J. Ohara

Time	Name	Oral	Poster	Title
11:00	Kanamori	X		Development of Polymer Inclusion Membranes (PIMs) for the Treatment of Radioactive Wastewater
11:20	Luca	X		Hydrophilic Properties of Rare-Earth- and Nitrogen-Doped TiO ₂ Thin Films
11:40	Minakata	X		Fabrication of Nanometer Size Periodic Domain Inversion in LiNbO ₃ Using Circular Form FCE Method
12:00	Mizoguchi	X		Membrane Separation of Organic Liquid Mixtures – Membrane Structures and Separation Performance
12:20	Nakamura	X		Hydrophilic Property of SiO ₂ /TiO ₂ Double Layer Films
P15	Araki		X	Diamond Films synthesis by Flame CVD
P16	Rusu		X	Preparation and Characterization of Some Transparent conducting Oxides in Thin Films
P17	Mizoguchi		X	Preferential Mineralization of CaCO ₃ Layers on Polymere Surface from CaCl ₂ and Water-Soluble Carbonate Salt Solutions containing Poly(acrylic acid)
P27	Filipcsei		X	Unique Pattern Formation of poly(N-isopropyl acrylamide) Gels
P28	Csetneki		X	Temperature-sensitive smart membranes

Session Chairman: G. Popa

Automatic Control (Automatics, Informatics, Signal Transmission and Robotics)
and e-learning (*Wednesday, Sep. 21*)



Time	Name	Oral	Poster	Title	
13:40	Korondi			Internet-based Telemanipulation	Key note lecture
14:20	Asshoff	X		e-teaching@university	
14:40	Resko	X		Distributed Motion Tracking System for Advanced Industrial Robot Programming	
15:00	Varkonyi-Koczy	X		Dynamic, Brightness and Contrast Tuned Fuzzy Based Image Processing Algorithms	
P18	Korondi		X	Intelligent Space based on Ubiquitous Computing	
P19	Korondi		X	Multimedia Course for power electronics and motion control	

Session Chairman: S. Kawahito

Polymer Electronics (*Wednesday, Sep. 21*)



Time	Name	Oral	Poster	Title
15:40	Farell	X		Synthesis and properties of poly/ogliomers based on a "flexible" cruciform structure
16:00	Galbrecht	X		Synthesis and application of novel semiconducting polyfluorenes with electrophosphorescent on-chain platinum-salen chromophores
16:20	Kazachenko	X		Thin-film deposition of polymeric nano composite by electron beam
P20	Fillipcsei		X	Unique Properties of Photo- and Thermo Responsive poly(N-isopropyl acrylamide) Gels
P21	Galbrecht		X	Synthesis and application of novel semiconducting polyfluorenes with electrophosphorescent on-chain platinum-salen chromophores

Session Chairman: J. Ohara

Semiconductor Physics (Device Physics and Sensors) (*Thursday, Sep. 22*)



Time	Name	Oral	Poster	Title	
9:00	Ohara			Development of High Aspect Ratio Si-Etching Process	Key note lecture
9:40	Gnatyuk	X		Application of pulsed laser irradiation in the semiconductor sensor fabrication	
10:00	Ikeda	X		Single-Charge-Tunneling behaviours in Two-Dimensional Random Multidot Channel Field-Effect Transistors	
10:20	Ogita	X		Hall and magnetoresistance effects in liquid metals comparing with amorphous metals and semiconductors using simultaneous ac-dc method	
11:00	Park	X		A Wide Dynamic Range Image Sensor with Multiple Exposure Time Signal Synthesis	
11:20	Tabe	X		Single-Photon Detection by Silicon Single-Charge-Tunneling Devices	
P22	Aoki		X	Photon-counting X-ray CT	
P23	Aoki/Mimura		X	Emission characteristics of functional field emitters for nano-vision science	
P24	Deák		X	Preparation and characterization of particulate Langmuir-Blodgett films	
P25	Nakagawa		X	Fabrication of ZnO-based materials and nanostructures by MOCVD	
P26	Nakanishi		X	Synthesis of Eu-doped red-emitting (Sn _{1-x} Bax) or near ultra-violet excitation	

Session Chairman: A.R. Varkonyi-Koczy