

Saturday November 4th, 2023

Venue: NCSR “Demokritos” Congress Center

On Saturday November 4th the Conference will hold several **parallel Sessions
Please, check the location of the Session you are interested in!**

Sessions 1, 5, 6, 8 and 10: Main Auditorium
Sessions 7, 9 and 11: Lecture Hall “Paradellis”, (Tandem Building, 1st floor)

Poster Session II will be held at the “Small Amphitheater” adjacent to the Main Auditorium
The **Exhibition** will be located at the Foyer of the Main Auditorium
Coffee and Lunch Breaks will be served at the Atrium next to the Foyer

Session 5	Trends in Micro and Nanomanufacturing (Main Auditorium) Chair: Prof. F. Farmakis
09:30-10:15	Plenary Presentation <i>The critical role of resist materials for patterning in semiconductor industry: recent developments and perspectives</i> Dr P. Argitis
10:15-10:30	<i>Laser Direct Transfer of 2D Materials: a digital patterning and printing process for 2D electronics</i> I. Cheliotis, F. Zacharatos, A. Pesquera, A. Zurutuza, L. Tsetseris and I. Zergioti
10:30-10:45	<i>Unlocking nanomanufacturing: developing nano enabled plastic components and surfaces by injection moulding</i> K. Tourlouki, T. Tachtsidis, N. Dimogerontaki and N. Kehagias
10:45-11:00	<i>Bio-architectonic photonic elements by systolic processing of aerogels and xerogels</i> K. Papachristopoulou, V. Charalampidis, and N. Vainos
11:00-11:15	<i>Laser-Engraved Holograms as Entropy Source for Random Number Generators</i> Ch. Tselios, A. Tsakas, S. Mazzucato, Ch. Politi, P.s Rizomiliotis and D. Alexandropoulos
11:15-11:30	<i>Refractive index controllable plasmonic color metasurfaces fabricated by Nanoimprint lithography</i> N. Dimogerontaki, N. Matthaikakakis, N. Papanikolaou and N. Kehagias
11:30-12:00	Coffee Break (Atrium)

Session 6	Microelectronics I Chair: Prof. S. Gardelis	Session 7	Computational Methods & Modeling Chair: Prof. D. Tassis
12:00-12:45	Plenary Presentation <i>Reliability Issues in MEMS Actuators</i> Prof. George Papaioannou		
12:45-13:00	<i>Cryogenic GaN HEMT operation at low current levels</i> <u>M. Bucher</u> , N. Roussos, L. Chevas, N. Makris, N. Fasarakis, and Ch. Theodorou	12:45-13:00	<i>Quantitative characterization of hierarchical multiscale surfaces of micro and nanostructured materials</i> <u>G. Papavieros</u> , V. Constantoudis, N. Vouroutzis, E. Gogolides
13:00-13:15	<i>Advanced threshold voltage extraction methodologies for GaN High Electron Mobility Transistors</i> <u>L. Chevas</u> , N. Makris, M. Kayambaki, A. Kostopoulos, A. Stavrinidis, G. Konstantinidis and M. Bucher	13:00-13:15	<i>Comparing the phenomenological models for the thermoluminescence of micro- and nanostructured radiation dosimeters; experimental and simulation results</i> E. Tsoutsoumanos, N. Laksaris, P. G. Konstantinidis, T. Karakasidis, G. Kitis and <u>G. S. Polymeris</u>
13:15-13:30	<i>Charging of Si₃N₄ thin dielectric films in the presence of field emission</i> <u>J. Theocharis</u> , D. Birmpiliotis, S. Gardelis and G. Papaioannou	13:15-13:30	<i>A Computational framework for optimal design of devices for water decontamination from heavy metals</i> Ch. Liosis, E. Karvelas, <u>Th. Karakasidis</u> , and I. Sarris
		13:30-13:45	<i>SEM-based computational nanometrology: The case of measuring the thickness of deposited films on rough substrates from top-down SEM images</i> A. Kondi, E.M. Papia, <u>V. Constantoudis</u> , D. Nioras, A. Kastania, A. Tserepi and E. Gogolides
13:30-15:00	Lunch Break		

Session 8	Microelectronics II Chair: Prof. M. Bucher	Session 9	Nanomaterials and Nanostructures II Chair: Dr N. Kehagias
15:00-15:20	Invited Talk Memristor nanodevices for novel computation Prof. G. Sirakoulis	15:00-15:15	<i>Combinatorial co-doping of NiO for enhancing the UV photovoltaic performance of all-oxide solar cells</i> Ch. Aivalioti, A. Papadakis, E. Manidakis, A. Kostopoulos, M. Androulidaki, M. Kayambaki, K. Tsagaraki, Z. Viskadourakis, E. Spanakis, N.T. Pelekanos, M. Modreanu and <u>E. Aperathitis</u>
15:20-15:35	<i>On-edge artificial afferent nerve complemented with freeforming and SiO₂ based terminal synapses</i> G. Kleitsiotis, P. Bousoulas, C. Tsiouostas and D. Tsoukalas	15:15-15:30	<i>Impact of nanoplates on phase diagram, order parameter, and electro-optical properties of nematic phases</i> <u>S. B. Atata</u> , V. Tzitzios and I. Lelidis
15:35-15:50	<i>Wafer-scale CVD graphene-based Josephson field-effect transistors with local top-gate tenability</i> <u>H. Bohuslavskyj</u> , K. Viisanen, B. Realista Ferreira, J. Ma, E. Tuominen, M. Möttönen, M. Prunnila, and A. Generalov	15:30-15:45	<i>Plasma nanotexturing on horizontal and inclined polymeric surfaces: experiments, characterization and modelling</i> <u>A. S. Kastania</u> , S. Mouchtouridis, A. Zeniou, G. Kokkoris, V. Constantoudis, A. Tserepi, G. Schider, D. Borstner, P. Melchior, D. Nees, B. Stadlober and E. Gogolides
15:50-16:05	<i>Electron emission from a sub-nm radius emitter exhibiting all three field, thermionic and space charge emission</i> V.I. Kleshch, P.A. Zestanakis and <u>J.P. Xanthakis</u>	15:45-16:00	<i>Comparing the thermal decomposition of Ammonium tetrathiomolybdate, (NH₄)₂MoS₄, under Ultra high vacuum, H₂ and H₂O atmosphere</i> <u>L. Syggelou</u>
		16:00-16:15	<i>Resistivity variation of carbon-based nanomaterials in lime-based restoration pastes</i> <u>M.E. Stogia</u> , Z. S. Metaxa, S. K. Kourkoulis, N. D. Alexopoulos
16:15-16:45	Micro Nano Society Meeting		
16:15-17:45	Poster Session II		
16:15-17:45	Coffee Break		

Session 10		Session 11	
High-frequency Electronics and Photonics Chair: Dr G. Konstantinidis		Sensors and Biochemical Sensors Chair: Dr N. Papanikolaou	
17:45-18:05	Invited Talk <i>Combining sensing and electronics based on Transition metal dichalcogenides and other layered materials</i> Dr G. Deligeorgis	17:45-18:00	<i>Explosive detection with SERS on Ag-deposited nanostructured Boehmite Substrates</i> A. Dimitriou, V. Shvalya, P. Sarkiris, A. S. Kastania, U. Cvelbar, N. Papanikolaou and E. Gogolides
18:05-18:20	<i>Metasurfaces and 2D materials for photonic applications</i> O. Tsilipakos	18:00-18:15	<i>Integrated photonics multi-sensor for use in composite materials manufacturing processes, SEER</i> Ch. Zervos, G. Pouloupoulos, G. Syriopoulos, E. Kyriazi, A. Poulimmenos, J. Missinne, M. Szaj, F. Bourcier, S. Maugis, E. Hontzopoulos, A. Skordos, G.van Steenberge and H. Avramopoulos
18:20-18:35	<i>Integrated passive Q-switched and mode-locked lasers utilizing TMD gain and graphene saturable absorption</i> G. Nousios, D. Chatzidimitriou, Th. Christopoulos, O. Tsilipakos, and E. E. Kriezis	18:15-18:30	<i>Determination of sepsis biomarkers at the Point-of-Care with a White Light Reflectance Spectroscopy biosensing device</i> D. Tsounidi, V. Christianidis, D. Goustouridis, C. Kroupis, S. Kakabakos, P. Petrou and I. Raptis
18:35-18:50	<i>A self-consistent modelling framework for graphene-based photonics and optoelectronics in NIR to THz</i> E. Lidorikis, I. Vangelidis, A. Dagkli, and S. Doukas	18:30-18:45	<i>Development of a device based on an Anisotropic Magnetoresistance sensor for Steel Health Monitoring</i> G. Stamou, S. Angelopoulos, A. Ktena, E. Hourdakis and E. Hristoforou
		18:45-19:00	<i>Plasma nanotexturing of membranes for use in water separation technologies</i> A. Zeniou, E. Manouras, D. Ioannou and E. Gogolides

19:05-19:40	Awards and Closing Ceremony (Main Auditorium)
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