



# MicroNano 2024 International Conference



11-13 October 2024, FNS, University of the Aegean, LEMNOS

## 11th International Conference on Micro-Nanoelectronics, Nanotechnology and MEMS

Venue: Garofalidio Lecture Hall & Municipal Cinema Maroula

### Sponsors



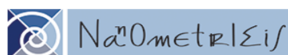
We acknowledge the Municipality of Lemnos for the kind concession of the "Maroula" Cinema and the "Galiouri" hall.

We thank the director of SAEK Lemnos, Iulia Lygda, for the cooperation.



Silver Sponsorship  
(For the coffee breaks)

### Exhibitors



Poster presentations (odd numbers on Friday and even numbers on Saturday)			
Poster No	Presenter	Title	Poster session
1	Chatzandroulis Stavros	Investigation of PDMS Microfluidic Channel Fabrication and Integration on Biosensing Platforms <u>S.Chatzandroulis</u> , M.K.Filippidou, S.Ntouskas, A.Tserepi	I
2	Karani Maria	Li-ion battery materials:Advanced characterization tools <u>M.Karani</u> , G.Kastrinaki, E.Daskalos, N.Vlachos, G.Karagiannakis	II
3	Hourdakis Emmanouel	Lateral Schottky-based photovoltaic devices <u>E.Hourdakis</u> , A.Kaidatzis	I
4	Theocharis Ioannis	Impact of Metal Contacts on Resistive Switching Behavior in SiN Dielectric Films for MEMS Capacitors <u>I.Theocharis</u> , S.Gardelis, G.Papaioannou	II
5	Sarkiris Panagiotis	Superhydrophobic surfaces for reduced friction and pressure drop in laminar and turbulent flows <u>P.Sarkiris</u> , E.Kaloudis, K.Ellinas	I
6	Tsounidi Dimitra	Carbyne-modified silicon chips as biosensing surfaces in White Light Reflectance Spectroscopy platform <u>D.Tsounidi</u> , P.Petrou, E.Manouras, A.Tserepi, E.Gogolides	II
7	Kondi Alex	Enhancing Nanomanufacturing Precision and Efficiency through Machine Learning: Applications in Etching and Deposition Processes <u>A.Kondi</u> , E.M.Papia, V.Constantoudis	I
8	Papia Efi-Maria	Machine Learning-Driven Inverse Design of Hexagonal Moiré Structures for Customizable Pore Characteristics <u>E.M.Papia</u> , A.Kondi, V.Constantoudis	II
9	Kosmas Ellinas	Fabrication of superhydrophobic, micro-nanotextured biopolymers produced through valorization of Brewer's spent yeast D.Ioannou, I.D.Koukoumaki, M.Karpeli, D.Sarris, E.Gogolides, <u>K.Ellinas</u>	I
10	Kaltsas Grigoris	Unique Identification of Printed Structures Through Edge Roughness Detection <u>G.Kaltas</u> , D.Mpampakos, A.Apostolakis, V.Constantoudis, E.Zois	II
11	Filippos Farmakis	Improved core-shell silicon anode for Lithium-Ion Batteries with the carbonization of a polydopamine layer Ioanna Lefa, Georgios Charalampopoulos, Dimitrios P. Argyropoulos, Georgia Moisiadou, Maria Daletou, <u>Filippos Farmakis</u>	I
12	Tsagkaraki Katerina	Determination of III-Nitride compound semiconductors polarity by SPM methods <u>K.Tsagkaraki</u> , A.Adikimenakis, A.Kostopoulos, A. Georgakilas	II
13	Filippou Ioannis	Microfabricated, Asymmetric Flexible Ultra-Thin Polymer Vapor Chambers for phase change heat transfer applications <u>I.Filippou</u> , V.Tselepi, D.Nioras, K.Ellinas	I
14	Kontomitrou Vasiliki	Considering sustainability in nanofabrication cleanrooms: Initial thoughts to accelerate the concept <u>V.Kontomitrou</u> , S.Lymeropoulou, G. Stavriniadis, A. Stavriniadis, A.Kostopoulos, G.Konstantinidis, L.Michalas	II
15	Chatzichristidi Margarita	Fluoropolymer surfaces modification using ultraviolet irradiation <u>M.Chatzichristidi</u> , M.E.Mylona, T.Manouras, A.Kanioura, P.Petrou, M.Vamvakaki	I
16	Kleitsiotis Georgios	Ultra-Low Power CBRAM with Multilevel Cell Precision for Digital Twins of Engineered Living Materials <u>G. Kleitsiotis</u> , D. Mantas, P. Bousoulas, C. Tsiousta, I. A. Frygos, D. Tsoukalas and G.Sirakoulis	II
17	Skaltsounis Panagiotis	Inertial microfluidic device bearing cavities for microparticle separation <u>P.Skaltsounis</u> , G.Kokoris, E.Gogolides, A.Tserepi	I
18	Alimisis Vassilis	A low-power, analog integrated Artificial Neural Network classifier for IoT applications <u>V.Alimisis</u> , C.Dimas, P.P.Sotiriadis	II
19	Louris Evangelos	Memristive phenomena in fiber-based Organic Electrochemical Transistors for potential textile circuits <u>E.Louris</u> , S.Stavriniadis, D.Tassis	I
20	Fouka Athanasia	Hydrothermal Growth of CuO nanotextured layers on kapton substrates <u>A.Fouka</u> , M.Chatzichristidi, E.Makarona, A.Kostaki	II
21	Kostopoulos Athanasios	Transforming GaN Nanocones into Uniform Nanowires: Advanced Etching Techniques for NW-FET Applications <u>A.Kostopoulos</u>	I

22	Vasileios Charalampidis	Micro-optical elements via systolic miniaturization of free-form silica aerogel masters <u>V.Charalampidis</u> , K.Papachristopoulou ,N.A.Vainos	II
23	Eleftherios Bagiokis	Functional Polymer/CsPbBr <sub>3</sub> Nanolayers by Pulsed Femtosecond-Laser Deposition <u>E.Bagiokis</u> , A. Ioannou, Z. Orphanos, I. Koutselas, N. A. Vainos	I
24	Zannis Orphanos	Agile Fabrication of Functional 3D-Microstructures for Advanced Optical Applications <u>Z.Orphanos</u> , V. Charalampidis, K. Papachristopoulou, N. A. Vainos	II
25	Eleni Makarona	Microwave-assisted Synthesis of NiO Nanoparticles and heir Application to Composite Lithographic Resist Materials M.Chatzychristidi, P. Katsoufis, N. Stavridis, A Kontoliou, V. Psycharis and E.Makarona	I
26	Eleni Makarona	Cost-efficient CuO Nanoarchitectures for SERS Biosensing A. Dimitriou, <u>E. Makarona</u> , A. Kanioura, G. Geka, A. Kastania, A. Fouka, M. Chatzychristidi and N. Papanikolaou	II
27	Panagiotis Dimitrakellis	Low temperature plasma surface engineering of nanomaterials for applications in energy and environment <u>P.Dimitrakellis</u>	I
28	Panagiotis Dimitrakellis	From hydrophilic to hydrophobic surface modification of metals and polymer-based materials using atmospheric pressure plasma processing Panagiotis Dimitrakellis, Isabelle Géraud-Grenier, Konstantinos Kourtzanidis, Stephane Pellerin, Francois Faubert	II
29	George Tsekenis	Aptamer-ligand interactions through the unconventional use of classical biophysical techniques: New insights gained on the strength and mode of their association Christina Bizintiki, Nikitas Melios, Panagiotis Giannousas, Petros Kelemenis, Anastasios Economou, George Tsekenis	I
30	Paul Manoloudis	Development of simulation model for Schottky barrier Phonovoltaic devices with TCAD Silvaco Atlas Paul Manoloudis, Matthias Bucher and Dimitrios Tassis	II