

CONFERENCE PROGRAM

Friday November 4th

Micro&Nano 2022: OPENING

14:00 Welcome Coffee & Registrations

14:30 Opening

14:45 Strain Engineering in 2D material based transistors

Parthenios John

Plenary Talk

15:15 - 16:15

Electronic Devices I

Chair: Tsoukalas Dimitrios

15:15 Active Load Inverter Design based on FORTH
FET technology based on bilayer MoS₂

Papadopoulou Alexia

15:30 Overview of Total Ionizing Dose Degradation
Mechanisms as Observed in 65nm Bulk-
CMOS MOSTs

Chevas Loukas

15:45 Behavior of InGaAs MOSFET short channel
effects down to deep cryogenic conditions

Theodorou Christoforos

16:00 Nonlinear analysis of electric current noise in
nano-MOSFETs using Visibility Graphs

Antoniades Ioannis

16:15 - 16:35

Announcement

16:15 Chips Act

Gongolidis Vasileios
(online)

16:35 - 16:50

Coffee Break

16:50 - 18:20

Sensors and Actuators

Chair: Tsamis Christos

F1

F2

16:50	Intermodulation phenomena in MEMS capacitors operating in Field Emission and Townsend breakdown regimes	Papaioannou George
17:05	Flexible microheaters utilizing a combination of screen printing and inkjet printing technologies	Apostolakis Apostolos
17:20	Flexible graphene field effect transistors as strain sensors	Katirtsidis Alexandros
17:35	Heavy Metal Ion Detection using monolayer MoS2 based and Pt nanoparticle based biosensors	Tsoukalas Dimitrios
17:50	Temperature and Strain evaluation of screen-printed Ag and Carbon-based inks on flexible substrates	Pilatis Aggelos
18:05	Holistic sensing platform based on InterDigitated Electrodes for the quantitative determination of concentration of VOCs	Raptis Ioannis

18:25 - 19:15

Energy

F3

Chair: Chatzichristidi Margarita

18:25	Exploiting the triboelectric effect for mechanical energy harvesting	Tsamis Christos
		<u>Invited</u>
18:45	Void and Residual Silicon Dioxide Area: Their role on the Electrochemical Performance of Silicon Nanoparticles Encapsulated by Graphene	Argyropoulos Dimitrios
19:00	A comparison of graphene and carbon nanotubes composite electrodes for solid and liquid electrolyte supercapacitors	Lefa Ioanna