Monday, 28 June 2021	
9:00-9:15	**Conference Opening**
9:15-10:00	**New Challenges of Printed High-κ Oxide Dielectrics** E. Carlos, R. Branquinho, R. Martins, E. Fortunato CENIMAT/i3N Departamento de Ciência dos Materiais, Faculdade de Ciências e Tecnologia (FCT), Universidade NOVA de Lisboa (UNL), and CEMOP/UNINOVA, Caparica, Portugal
10:00-10:45	**20 Years of Reconfigurable Field-Effect Transistors: From Concepts to Future Applications** T. Mikolajick[1, 2], G. Galderisi[1], M. Simon[1], S. Rai[3], A. Kumar[3], A. Heinzig[2], W. M. Weber[4], J. Trommer[1] [1]NaMLab gGmbH, Dresden, Germany [2]Chair for Nanoelectronics, TU Dresden, Dresden, Germany [3]Chair for Processor design, Center for Advancing Electronics Dresden, TU Dresden, Dresden, Germany [4]Institute of Solid State Electronics, TU Wien, Vienna, Austria
10:45-11:15	**Break**
Dielectrics for MIM and DRAM Chair: C. Dubourdieu, Helmholtz Zentrum Berlin, Germany	
11:15-11:30	**Opportunity for Band Alignment Manipulation of Perovskite Oxide Stacks by Interfacial Dipole Layer Formation** A. Tamura[1], S. Jang[2], Y.-G. Park[2], H. Lim[2], K Kita[1] [1]Dept. of Materials Engineering, The Univ. of Tokyo, Tokyo, Japan [2]Semiconductor R&D Center, Samsung Electronics, Gyeonggi-do, Korea
11:30-11:45	**Poly(V_3D_3), an iCVD Polymer with Promising Dielectric Properties for High Voltage Capacitors** C. Zavvou, J. Cluzel, D. Mariolle, A. Lefevre, V. Jousseaume [1]Univ. Grenoble Alpes, CEA, Leti, Grenoble, France
11:45-12:00	**Fabrication and Modelling of MI_nM Diodes with Low Turn-On Voltage** I. Nemr Noureddine[1], N. Sedghi[1], J. Wrench[2], P. Chalker[2], I. Z. Mitrovic[1], S. Hall[1] [1]Dept. of Electrical Engineering and Electronics, University of Liverpool, Liverpool, UK [2]Centre for Advanced Materials, School of Engineering, University of Liverpool, Liverpool, UK
12:00-12:15	**Applicability of Sc_2O_3 Versus Al_2O_3 in MIM Rectifiers for IR Rectenna** S. Almalki, S. B. Tekin, N. Sedghi, S. Hall, I. Z. Mitrovic Dept. of Electrical Engineering and Electronics, University of Liverpool, Liverpool, UK
12:15-14:15	**Break**
2D materials (I) Chair: V. Afanas'ev, KU Leuven, Belgium	
14:15-14:45	**Crystalline Insulators for Scalable 2D Nanoelectronics** Y. Y. Illarionov[1, 2], T. Knobloch[1], T. Grasser[1] [1]Institute for Microelectronics (TU Wien), Vienna, Austria [2]Ioffe Institute, St-Petersburg, Russia

14:45:15:00	**Investigating Interface States and Oxide Traps in the MoS_2/Oxide/Si System** E. Coleman[1], G. Mirabelli[1], P. Bolshakov[2], P. Zhao[2], E. Caruso[1], F. Gity[1], S. Monaghan[1], K. Cherkaoui, R. M. Wallace[2], C. D. Young[2], R. Duffy[1], P. K. Hurley[1] [1]Tyndall National Institute, University College Cork, Cork, Ireland [2]Department of Materials Science and Engineering, University of Texas at Dallas, Richardson, TX, USA
15:00-15:15	**Simulation Study of Fermi Level Depinning in Metal-MoS_2 Contacts** P. Khakbaz[1], F. Driussi[1], P. Giannozzi[1, 2], A. Gambi[1], D. Esseni[1] [1]Università degli Studi di Udine, Udine, Italy [2]CNR-IOM, Istituto dell'Officina dei Materiali, SISSA, Trieste, Italy
15:15-15:30	**Break**
2D materials (II) Chair: P. Hurley, Tyndall National Institute, Ireland	
15:30-15:45	**Optical Transitions in Monolayer WS_2 Observed through Transient Photoconductivity in MIS Structures** G. Delie, I. Shlyakhov, K. Iakoubovskii, S. Achra, V. V. Afanas'ev Department of Physics and Astronomy, KU Leuven, Leuven, Belgium
15:45-16:00	**Interface Admittance Measurement and Simulation of Dual Gated CVD WS_2 MOSCAPs: Mapping the $D_{IT}(E)$ Profile** V. Mootheri[1, 2], X. Wu[1], D. Cott[1], B. Groven[1], M. Heyns[1, 2], I. Asselberghs[1], I. Radu[1], D. Lin[1] [1]IMEC, Leuven, Belgium [2]KU Leuven, Leuven, Belgium
16:00-16:15	**Assessment of 2D-FET Based Digital and Analog Circuits on Paper** M. Vatalaro[1], R. De Rose[1], M. Lanuzza[1], G. Iannaccone[2], F. Crupi[1] [1]DIMES, University of Calabria, Rende, Italy [2]Dipartimento di Ingegneria dell'Informazione, University of Pisa, Pisa, Italy
16:15-16:30	**Quantum Capacitance Transient Phenomena in High-K Dielectric Armchair Graphene Nanoribbon Field-Effect Transistor Model** A. Avnon[1], R. Golman[1], E. Garzón[1, 2], H.-D. Ngo[3], M. Lanuzza[2], A. Teman[1] [1]Enics, Faculty of Engineering, Bar-Ilan University, Ramat Gan, Israel [2]DIMES, University of Calabria, Rende, Italy [3]IZM Fraunhofer Institute, Berlin, Germany

Tuesday, 29 June 2021

Ferroelectrics and functional oxides

Chair: J. Robertson, University of Cambridge, UK

9:00-9:30	**HfO_2-Based Ferroelectric Devices for Diverse Applications** R. Huang Peking University, Peking, China
9:30-10:00	**CMOS Back-End-Of-Line Compatible Ferroelectric Tunnel Junction Devices** V. Deshpande[1], K. S. Naira[2], M. Holzer[1, 2], S. Banerjee[1], C. Dubourdieu[1, 2] [1]Helmholtz-Zentrum Berlin für Materialien und Energie, Berlin, Germany [2]Freie Universität Berlin, Physical Chemistry, Berlin, Germany
10:00-10:15	**Evidence of Ferroelectric HfO_2 Phase Transformation Induced by Electric Field Cycling Observed at a Macroscopic Scale** S. Nittayakasetwat, K. Kita Department of Materials Engineering, Graduate School of Engineering, University of Tokyo, Tokyo, Japan
10:15-10:30	**Electron Trapping in Ferroelectric $HfZrO_4$ and Al- and Si-Doped Layers** R. A. Izmailov[1], B. J. O'Sullivan[2], M. Popovici[2], V. V. Afanas'ev[1] [1]KU Leuven, Leuven, Belgium [2]IMEC, Leuven, Belgium
10:30-11:00	**Break**

Materials for non-volatile memories (I)

Chair: S. Strangio, University of Pisa, Italy

11:00-11:15	**Role of Temperature, MTJ Size and Pulse-Width on STT-MRAM Bit-Error Rate and Backhopping** J. Tan[1, 2], J. H. Lim[1, 2], J. H. Kwon[1], V.B. Naik[1], N. Raghavan[2], K. L. Pey[2] [1]GLOBALFOUNDRIES Singapore Pte. Ltd., Singapore [2]Singapore University of Technology and Design, Singapore
11:15-11:30	**Relaxing Non-Volatility for Energy-Efficient DMTJ Based Cryogenic STT-MRAM** E. Garzón[1, 2], R. De Rose[1], Felice Crupi[1], Lionel Trojman[3], Adam Teman[2], Marco Lanuzza[1] [1]DIMES, University of Calabria, Rende, Italy [2]Enics, Faculty of Engineering, Bar-Ilan University, Ramat Gan, Israel [3]LISITE, ISEP - Institut Supérieur d'Électronique de Paris, Paris, France
11:30-11:45	**Effect of the Switching Layer on CBRAM Reliability and Benchmarking Against OxRAM Devices** A. Belmonte[1], G. Reale[1, 2], A. Fantini[1], J. Radhakrishnan[1, 3], A. Redolfi[1], W. Devulder[1], L. Nyns[1], S. Kundu[1], R. Delhougne[1], L. Goux[1], G. S. Kar[1] [1]IMEC, Leuven, Belgium [2]University of Calabria, Rende, Italy [3]Department of Semiconductor Physics, KU Leuven, Leuven, Belgium

11:45-12:00	**SPICE Modeling of Cycle-to-Cycle Variability in RRAM Devices** E. Salvador[1], M. B. Gonzalez[2], F. Campabadal[2], J. Martin-Martinez[1], R. Rodriguez[1], E. Miranda[1] [1]Departament d'Enginyeria Electrònica, Universitat Autònoma de Barcelona, Cerdanyola del Valles, Spain [2]Institut de Microelectrònica de Barcelona, IMB-CNM, CSIC, Cerdanyola del Valles, Spain
12:00-12:15	**Structural and Electronic Rearrangement in Ovonic Switching $GexSe_{1-x}$(0.4<x<0.72) Films** A. S. Konashuk[1], E. O. Filatova[1], A. A. Sokolov[2], V. V. Afanas'ev[3], M. Houssa[3], A. Stesmans[3] [1]Institute of Physics, St. Petersburg State University, St. Petersburg, Russia [2]Helmholtz-Zentrum Berlin für Materialien und Energie GmbH, Berlin, Germany [3]Department of Physics, KU Leuven, Leuven, Belgium
12:15-12:30	**Study of the Set and Reset Transitions in HfO_2-Based ReRAM Devices Using a Capacitor Discharge** H. García[1], G. Vinuesa[1], O. G. Ossorio[1], B. Sahelices[2], H. Castán[1], S. Dueñas[1], M. B. González[3], F. Campabadal[3] [1]Dpto. Electricidad y Electrónica, University of Valladolid, Valladolid, Spain [2]Dpto. Informática, University of Valladolid, Valladolid, Spain [3]Institut de Microelectrònica de Barcelona, IMB-CNM (CSIC), Bellaterra, Spain
12:30-14:30	**Break**
Materials for non-volatile memories (II) Chair: T. Ando, IBM, USA	
14:30-14:45	**Enhanced Serial RRAM Cell for Unpredictable Bit Generation** R. Rodríguez-Montañés[1], D. Arumí[1], A. Gómez-Pau[1], S. Manich[1], M. B. Gonzalez[2], F. Campabadal[2] [1]Departament d'Enginyeria Electrònica, Universitat Politècnica de Catalunya, Barcelona, Spain [2]Institut de Microelectrònica de Barcelona, IMB-CNM (CSIC), Bellaterra, Spain
14:45-15:00	**Effective Control of Filament Efficiency by Means of Spacer $HfAlO_x$ Layers and Growth Temperature in HfO2 Based ReRAM Devices** G. Vinuesa[1], O. G. Ossorio[1], H. García[1], B. Sahelices[1], H. Castán[1], S. Dueñas[1], M. Kull[2], A. Tarre[2], T. Jõgiaas[2], A. Tamm[2], K. Kukli[2] [1]Dpto. Electricidad y Electrónica, University of Valladolid, Valladolid, Spain [2]Institute of Physics, University of Tartu, Tartu, Estonia
15:00-15:15	**STT-MTJ Based Smart Implication for Energy-Efficient Logic-in-Memory Computing** R. De Rose[1], T. Zanotti[2], F. M. Puglisi[2], F. Crupi[1], P. Pavan[2], M. Lanuzza[1] [1]DIMES, University of Calabria, Rende, Italy [2]DIEF, University of Modena and Reggio Emilia, Modena, Italy

15:15-15:30	**Analysis of the Performance of Nb_2O_5-Doped SiO_2-Based MIM Devices for Memory and Neural Computation Applications** O. G. Ossorio[1], G. Vinuesa[1], H. García[1], B. Sahelices[1], S. Dueñas[1], H. Castán[1], M. Ritala[2], M.Leskelä[2], K. Kukli[3] [1]Dpto. Electricidad y Electrónica, University of Valladolid, Valladolid, Spain [2]Department of Chemistry, University of Helsinki, Helsinki, Finland [3]Institute of Physics, University of Tartu, Tartu, Estonia
15:30-15:45	**A Simple, Robust, and Accurate Compact Model for a Wide Variety of Complementary Resistive Switching Devices** M. Saludes-Tapia[1], M. B. Gonzalez[2], F. Campabadal[2], J. Suñé[1], E. Miranda[1] [1]Departament d'Enginyeria Electrònica, Universitat Autònoma de Barcelona, Cerdanyola del Valles, Spain [2]Institut de Microelectrònica de Barcelona, IMB-CNM, CSIC, Cerdanyola del Valles, Spain
15:45-16:00	**Stochastic Based Compact Model to Predict Highly Variable Electrical Characteristics of Organic CBRAM** S. Guitarra[1], P. Mahato[2], D. Deleruyelle[2], L. Raymond[3], L. Trojman[1, 4] [1]Colegio de Ciencias e Ingeniería, IMNE, Universidad San Francisco de Quito, Quito, Ecuador [2]Institut des Nanotechnologies de Lyon UMR CNRS, Institut National des Sciences Appliquées de Lyon, Villeurbanne, France [3]Aix Marseille Université, Université de Toulon, CNRS, CPT, Marseille, France [4]LISITE, ISEP - Institut Supérieur d'Électronique de Paris, Paris, France

Wednesday, 30 June 2021	
Materials for neuromorphic computing Chair: S. Slesazeck, NaMLab, Germany	
9:00-9:30	**From Resilience to Resistive Memory Variability in Binarized Neural Networks to Exploitation of Variability in Bayesian Neural Network** T. Hirtzlin CEA-Leti, Grenoble, France
9:30-9:45	**Single-Poly Floating-Gate Memory Cell Options for Analog Neural Networks** M. Paliy, T. Rizzo, P. Ruiu, S. Strangio, G. Iannaccone Dipartimento di Ingegneria dell'Informazione, University of Pisa, Pisa, Italy
9:45-10:00	**Microstructure Scaling in Metal-Insulator-Transitions of Atomic Layer Deposited VO_2 Films** K. Niang, G. Bai, H. Lu, J. Robertson Engineering Dept., Cambridge University, Cambridge, UK
10:00-10:15	**Influence of Variability on the Performance of HfO_2 Memristor-Based Convolutional Neural Networks** R. Romero-Zaliz[1], E. Pérez[2], F. Jimenez-Molinos[3], C. Wenger[2, 4], J. B. Roldán[3] [1]DaSCI, Granada University, Granada, Spain [2]IHP-Leibniz-Institut für innovative Mikroelektronik, Frankfurt, Germany [3]Departamento de Electrónica y Tecnología de Computadores, Universidad de Granada, Granada, Spain [4]BTU Cottbus-Senftenberg, Cottbus, Germany
10:15-10:30	**Robustness of Using Degree Of Match in Performing Analog Multiplication with Spin-Torque Oscillators** L. Mazza[1], V. Puliafito[2], M. Carpentieri[1], G. Finocchio[3] [1]Department of Electrical and Information Engineering, Politecnico of Bari, Bari, Italy [2]Department of Engineering, University of Messina, Messina, Italy [3]Department of Mathematical and Computer Sciences, Physical Sciences and Earth Sciences, University of Messina, Messina, Italy
10:30-11:15	**Break**
Dielectrics for power devices (I) Chair: K. Kita, University of Tokyo, Japan	
11:15-11:45	**Current Status of Lateral and Vertical Ga2O3 FET Technologies** M. Higashiwaki National Institute of Information and Communications Technology, Koganei, Japan
11:45-12:00	**Flat-Band Voltage Shift of 4H-SiC MOS Capacitors Induced by Interface Dipole Layer Formation at the Oxide-Semiconductor and Oxide-Oxide Interfaces** T.-H. Kil[1], M. Noguchi[2], H. Watanabe[2], K. Kita[1] [1]Department of Materials Engineering, The University of Tokyo, Tokyo, Japan [2]Advanced Technology R&D Center, Mitsubishi Electric Corporation, Amagasaki, Hyogo, Japan

12:00-12:15	**Mobility Degradation in 4H-SiC MOSFETs and Interfacial Formation of Carbon Clusters** Z. Zhang[1], Y. Guo[2], J. Robertson[1] [1]Engineering Dept., Cambridge University, Cambridge, UK [2]Electrical Engineering and Automation, Wuhan University, Wuhan, China
12:15-12:30	**TCAD Modeling of Bias Temperature Instabilities in SiC MOSFETs** G. Carangelo[1], S. Reggiani[1], G. Consentino[2], F. Crupi[2], G. Meneghesso[3] [1]ARCES and DEI, University of Bologna, Bologna, Italy [2]DIMES, University of Calabria, Rende, Italy [3]DEI, University of Padova, Padova, Italy
12:30-14:30	**Break**
Dielectrics for power devices (II) Chair: J. Franco, IMEC, Belgium	
14:30-15:00	**High Performance p-Channel GaN/AlN FETs for Wide-Bandgap CMOS** D. Jena Cornell University, Ithaca, United States
15:00-15:15	**Low-Frequency Noise Investigation of AlGaN/GaN High-Electron-Mobility Transistors** M. G. Caño de Andrade[1], L. F. de Oliveira Bergamim[1], B. Baptista Júnior[1], C. R. Nogueira[1], F. A. da Silva[1], K. Takakura[2], B. Parvais[3, 4], Eddy Simoen[3] [1]Institute of Science and Technology, São Paulo State University, Sorocaba, Brazil [2]Dept. of Information, Commun. and Electron. Eng., National Inst. of Technol., Kumamoto, Japan [3]IMEC, Leuven, Belgium [4]ETRO Department, Vrije Universiteit Brussels, Brussels, Belgium
15:15-15:30	**Barrier Height Tuning in Ti/4H-SiC Schottky Diodes** G. Bellocchi[1], M. Vivona[2], S. Rascunà[1], F. Roccaforte[2] [1]STMicroelectronics, Catania, Italy [2]CNR-IMM, Catania, Italy
15:30-15:45	**Analog Performance of GaN/AlGaN High-Electron-Mobility Transistors** L. F. de Oliveira Bergamim[1], Bertrand Parvais[2, 3], Eddy Simoen[2], M. G. Caño de Andrade[1] [1]Institute of Science and Technology, São Paulo State University, Sorocaba, Brazil [2]IMEC, Leuven, Belgium [3]ETRO Department, Vrije Universiteit Brussels, Brussels, Belgium

Thursday, 1 July 2021	
Electrical reliability and modelling Chair: R. De Rose, University of Calabria, Italy	
9:00-9:15	**A Multi-Energy Level Agnostic Simulation Approach to Defect Generation** A. Vici[1, 2], R. Degraeve[2], B. Kaczer[2], J. Franco[2], S. Van Beek[2], I. De Wolf[2, 3] [1]Dept. Electrical Engineering, KU Leuven, Leuven, Belgium [2]IMEC, Leuven, Belgium [3]Dept. Material Science, KU Leuven, Leuven, Belgium
9:15-9:30	**Understanding the Impact of Split-Gate LDMOS Transistors: Analysis of Performance and Hot-Carrier-Induced Degradation** P. Magnone[1], A. N. Tallarico[2], S. Pistollato[1], R. Depetro[3], G. Croce[3] [1]DTG, University of Padova, Vicenza, Italy [2]ARCES and DEI, University of Bologna, Cesena, Italy [3]Technology R/D, STMicroelectronics, Agrate Brianza, Italy
9:30-9:45	**Statistical Threshold Voltage Shifts Caused by BTI and HCI at Nominal and Accelerated Conditions** J. Diaz-Fortuny[1], P. Saraza-Canflanca[2], R. Rodriguez[1], J. Martin-Martinez[1], R. Castro-Lopez[2], E. Roca[2], F. V. Fernandez[2], M. Nafria[1] [1]Electronic Engineering Department, Universitat Autònoma de Barcelona, Barcelona, Spain [2]Instituto de Microelectrónica de Sevilla, IMSE-CNM, CSIC and Universidad de Sevilla, Sevilla, Spain
9:45-10:00	**Unified RTN and BTI Statistical Compact Modeling from a Defect-Centric Perspective** G. Pedreira[1], J. Martin-Martinez[1], P. Saraza-Canflanca[2], R. Castro-Lopez[2], R. Rodriguez[1], E. Roca[2], F. V. Fernandez[2], M. Nafria[1] [1]Electronic Engineering Department, Universitat Autònoma de Barcelona, Barcelona, Spain [2]Instituto de Microelectrónica de Sevilla, IMSE-CNM, CSIC and Universidad de Sevilla, Sevilla, Spain
10:00-10:15	**Investigation of the Anomalous Effect of the AC-Signal Frequency on Flat-Band Voltage of Al/HfO_2/SiO_2/Si Structures** A. Mazurak, B. Majkusiak Institute of Microelectronics and Optoelectronics, Warsaw University of Technology, Warsaw, Poland
10:15-10:30	**Computational Study of Group III-V Semiconductors and Their Interaction with Oxide Thin Films** L. A. Cipriano, G. Di Liberto, S. Tosoni Dipartimento di Scienza dei Materiali, Università di Milano-Bicocca, Milan, Italy
10:30-11:00	**Break**

Characterization techniques (I) Chair: V. Afanas'ev, KU Leuven, Belgium	
11:00-11:15	**Cryogenic Temperature DC-IV Measurements and Compact Modelling of N-channel Bulk FinFETs with 3-4nm Wide Fins and 20nm Gate Length for Quantum Computing Applications** S. Gupta[1], A. Rathi[1], B. Parvais[2, 3], A. Dixit[1] [1]Department of Electrical Engineering, IIT Delhi, New Delhi, India [2]IMEC, Leuven, Belgium [3]ETRO Department, Vrije Universiteit Brussels, Brussels, Belgium
11:15-11:30	**Study of RTN Signals in Resistive Switching Devices Based on Neural Networks** G. González-Cordero[1], M. B. González[2], M. Zabala[2], K. Kalam[3], A. Tamm[3], F. Jiménez-Molinos[1], F. Campabadal[2], J. B. Roldán[1] [1]Departamento de Electrónica y Tecnología de Computadores, Universidad de Granada, Granada, Spain [2]Institut de Microelectrònica de Barcelona, IMB-CNM (CSIC), Bellaterra, Spain [3]Institute of Physics, University of Tartu, Tartu, Estonia
11:30-11:45	**Exploiting the KPFM Capabilities to Analyze at the Nanoscale the Impact of Electrical Stresses on OTFTs Properties** A. Ruiz[1], S. Claramunt[1], A. Crespo[1], M. Porti[1], M. Nafria[1], H. Xu[2], C. Liu[2], Q. Wu[2] [1]Electronic Engineering Department, Universitat Autònoma de Barcelona, Barcelona, Spain [2]School of Electronics and Information technology, Sun Yat-Sen University, Guangzhou, China
11:45-12:00	**Custom Measurement System for Memristor Characterisation** F. V. Lupo[1], D. Scirè[1], M. Mosca[1], I. Crupi[1], L. Razzari[2], R. Macaluso[1] [1]Department of Engineering, Università degli Studi di Palermo, Palermo, Italy [2]Institut National de la Recherche Scientifique - Centre Énergie Matériaux Télécommunications, Montréal, Canada
12:00-14:30	**Break**
Characterization techniques (II) Chair: C. Leroux, CEA-LETI Grenoble, France	
14:30-14:45	**On the Interpretation of MOS Impedance Data in Both Series and Parallel Circuit Topologies** E. Caruso[1, 4], J. Lin[1], S. Monaghan[1], K. Cherkaoui[1], L. Floyd[1], F. Gity[1], P. Palestri[2], D. Esseni[2], L. Selmi[3], P. K. Hurley[1] [1]Tyndall National Institute, University College Cork, Cork, Ireland [2]DPIA, University of Udine, Udine, Italy [3]DIEF, University of Modena and Reggio Emilia, Modena, Italy [4]Infineon Technologies, Villach, Austria
14:45-15:00	**Shallow Electron Traps in High-k Insulating Oxides** R. A. Izmailov[1], B.J. O'Sullivan[2], M. Popovici[2], J.A. Kittl[1], V.V. Afanas'ev[1] [1]KU Leuven, Leuven, Belgium [2]IMEC, Leuven, Belgium

15:00-15:15	**A Simple Test Structure for the Electrical Characterization of Front and Back Channels for Advanced SOI Technology Development** M. Alepidis[1], I. Ionica[1], F. Milesi[2], N. Bresson[2], G. Gaudin[3], S. Cristoloveanu[1], S. Reboh[2] [1]University Grenoble Alpes, Grenoble INP, IMEP-LaHC, Grenoble, France [2]CEA, Leti, Minatec Campus, and University Grenoble Alpes, Grenoble, France [3]SOITEC, Parc Technologique des Fontaines, Bernin, France
15:15-15:30	**Characterization of Defect Density States in MoO_x for c-Si Solar Cell Applications** D. Scirè[1], R. Macaluso[1], M. Mosca[1], S. Mirabella[2], A. Gulino[3], O. Isabella[4], M. Zeman[4], I. Crupi[1] [1]Department of Engineering, University of Palermo, Palermo, Italy [2]Department of Physics and Astronomy, University of Catania, Catania, Italy [3]Department of Chemical Sciences, University of Catania, Catania, Italy [4]Photovoltaic Materials and Devices group, Delft University of Technology, Delft, the Netherland
15:30-15:45	**Harnessing Charge Injection in Kelvin Probe Force Microscopy for the Evaluation of Oxides** U. Celano[1, 2], Y. Lee[3], J. Serron[1], C. Smith[1], J. Franco[1], P. van der Heide[1] [1]IMEC, Leuven, Belgium [2]Faculty of Science and Technology, University of Twente, Enschede, The Netherlands [3]Samsung Electronics Co., Ltd.

Friday, 2 July 2021	
9:00-9:30	**Ferroelectric HfO_2 Based Memory Technology** M. Liu Institute of Microelectronics of Chinese Academy of Sciences, Peking, China
9:30-10:00	**Compound Semiconductor Devices for 5G Applications and Beyond** N. Collaert IMEC, Leuven, Belgium
10:00-10:30	**Nanolayer Boron-Semiconductor Interfaces and Their Device Applications** L. K. Nanver[1], L. Qi[2], X. Liu[1], T. Knežević[1] [1]MESA+ Institute for Nanotechnology, University of Twente, Enschede, The Netherlands [2]Delft University of Technology, Delft, The Netherlands
10:30-11:00	**Break**
11:00-11:15	**Best Student Paper Award**
11:15-11:30	**Conference Closing**