

**Novel High k Application Workshop****March 9<sup>th</sup>, 2017**

	<b>Presenter</b>	<b>Institute</b>	<b>Title of Presentation</b>
09:00:00	T. Mikolajick/U. Schroeder	Namlab	Welcome
	<b>Novel Devices</b>	<i>chair: U. Schroeder</i>	
09:15:00	E. Erben	GlobalFoundries Dresden, D	Impact of interface engineering on 22nm FD-SOI device reliability
09:35:00	N. Posseme	LETI, Grenoble, F	FEOL Patterning Challenges for Sub 14nm FDSOI Technology
10:15:00	A. Schmid/J. Heitmann	TUBA Freiberg, D	GdScO <sub>3</sub> as gate dielectric for AlGaN/GaN MISHFETs
10:35:00	M. Godlewski	Acad. of Sc. Warsaw, PL	Silicon-based solar cells with top 3D electrode by hydrothermal and ALD methods
10:55:00	Coffee break		
	<b>Novel Processes</b>	<i>chair: T. Mikolajick</i>	
11:25:00	M. Knaut	TU Dresden, IHM, D	ALD insitu process monitoring of HfO <sub>2</sub> based processes
11:45:00	A. O'Mahony	Oxford Instruments, UK	ALD deposited HfO <sub>2</sub> : Comparison of different precursors
12:05:00	D. Schmeisser	BTU Cottbus - Senftenberg, D	Insitu characterization of HfO <sub>2</sub> ALD growth
12:25:00	T. Tynell	IFW Dresden, D	ALD/MLD nanolaminates as diffusion barriers
12:45:00	Lunch - MPI		
	<b>RRAM</b>	<i>chair: U. Schroeder</i>	
14:00:00	CS Hwang	Seoul National University, KR	Stateful logic circuit and material using memristors
14:20:00	C. Wenger	IHP Frankfurt/Oder, D	Radiation hard design of HfO <sub>2</sub> based resistive memories
14:40:00	J. Robertson	Univ. Cambridge, UK	Materials selection for oxide-based resistive random access memories
15:00:00	U. Böttger	RWTH Aachen, D	Sub-ns resistive switching oxides
15:20:00	T. Mikolajick	Namlab Dresden, D	Versatile resistive switching in NbOx
15:40:00	Coffee break		
	<b>Ferroelectric devices</b>	<i>chair: T. Mikolajick</i>	
16:10:00	S. Beyer	GlobalFoundries/CNT/Namlab, D	A 28nm HKMG super low power embedded NVM technology based on FeFETs
16:30:00	A. Chernikova/ A. Markeev	Moscow IPT	HfO <sub>2</sub> based 1T-1C ferroelectric memory cells and arrays
16:50:00	K. Florent/J. v. Houdt	IMEC Leuven, B	Ferroelectric Doped Al:HfO <sub>2</sub> with Silicon as Electrodes for 3D NAND Applications
17:10:00	M. Pešić	Namlab Dresden, D	How to make a DRAM non-volatile: a ZrO <sub>2</sub> based AFE-RAM
17:30:00	End		
19:30	Workshop Dinner		