

Time	Day I - Morning Session 9:00AM - 12:00PM	
	Opening Remarks (Chair)	Authors
<b>(9:00 AM)</b>	<i>ASD Applications (Commercializing Advanced Process Technologies) - Moderator Dennis Hausmann</i>	
	<b>Using Chemical Selectivity to Control Atomic Placement in ALD (Invited)</b>	<b>S.F. Bent</b>
	Area-Selective Atomic Deposition of Ruthenium on Copper/Dielectric Surfaces for Nano- Interconnect Applications	A.K. Mandal, A. Delabie, M.H. van der Veen, N. Jourdan, J. Swerts & Z. Tokei S.Nguyen, R. Wojtecki, H. Shobha, K. Lionti, T. Haigh, B. Peethala, B. Haran, J. Li, J. Demarest, C. Murray, M. Breton, H. Huang Z.J. Devereaux, M. Manle, M.J. Li, N.M.K. Linn, M.S. Bakir, A. Kummel, C.H. Winter
	Integrated Selective deposition of SiCOH on SiCOH for Fully Aligned Via Structure in Interconnects Studies Toward Highly Selective Cobalt Metal ALD on Copper Features for Heterogeneous Chipllet Integration	
<b>(10:35 AM)</b>	<b>Coffee Break (15 minutes)</b>	
<b>(10:50 AM)</b>	<i>Inhibitor Systems for ASD (Part I) - Moderator Robert Clark</i>	
	<b>N-heterocyclic carbenes in selective area deposition (Invited)</b>	<b>C. Crudden</b>
	Area Selective Atomic Layer Deposition using Nitrogenous Aromatic Small Molecule Inhibitors	A. Shearer & S.F. Bent
	Area Selective Atomic Layer Deposition of HfO2 ALD on Metal, Oxide and Nitride Using Organothiol Inhibitor	S. Zoha, F. Pieck, R. Tonner, H.B.R. Lee
	Concluding Remarks (Robert Clark)	
	<b>Lunch Break (12:00-2 PM)</b>	
	Day I - Afternoon Session 2:00PM - 4:30PM	
<b>(2:00 PM)</b>	<i>Inhibitor Systems for ASD (Part II) - Moderator John Ekerdt</i>	
	Area-selective ALD Using Small Molecule Inhibitors of Different Sizes: Steric Shielding Versus Chemical Passivation	P.Yu, M.J.M. Merkx, I. Tezsevin, D.M. Hausmann, T. Sandoval, W.M.M. Kessels, A.J.M. Mackus
	Area Selective Atomic Layer Deposition of Ruthenium using Ru(ETCp)2 Inhibitor	C.T. Nguyen, N.L. Trinh, B. Gu, M. Lee, H.B.R. Lee
	Area-selective atomic layer deposition of Al2O3 on SiNx with SiO2 as the nongrowth surface	W. Xu, R.J. Gasvoda, P.C. Lemaire, K. Sharma, D.M. Hausmann, S. Agarwal
<b>(3:15 PM)</b>	<i>Mechanistic Understanding of ASD - Moderator Erwin Kessels</i>	
	<b>In-situ Studies of Nucleation Mechanisms During ALD of Platinum-Group Metals (Invited)</b>	<b>J. Dendooven</b>
	Mechanisms of Precursor Blocking by Aniline Inhibitor Molecules During Area-Selective ALD of TaN	M.J.M. Merkx, I. Tezsevin, R.H.G.M. Heinemans, R.J. Lengers, W.M.M. Kessels, T.E. Sandoval, A.J.M. Mackus
<b>(4:10 PM)</b>	<b>Coffee Break (15 minutes)</b>	
	<b>Theoretical Understanding on the Principles of Area-Selective Atomic Layer Deposition (Invited)</b>	<b>B. Shong</b>
	<b>In-Situ Electron Microscopy to Visualize Crystal Growth Mechanisms on Plain and Patterned Surfaces (Invited)</b>	<b>F. Ross</b>
	Concluding Remarks (Erwin Kessels)	
<b>(5:10 PM)</b>	<b>Reception</b>	
	<b>Drinks (Happy Hour &amp; Poster Session)</b>	
	<b>Posters</b>	<b>Authors</b>
	Understanding the Breakdown of Self-Assembled Monolayer Inhibitors in Area-Selective Atomic Layer Deposition	T.L. Liu, L. Zeng, K.L. Nardi, D.H. Hausmann, S.F. Bent
	Minimization of Hydrogen Plasma Damage	J.J. Spiegelman, D. Alvarez, J.Z. Spiegelman, Y. Cho, J. Wang, A.C. Kummel
	Surface Engineering for Selective Deposition on Patterned C/SiO2 Materials	M. Harake, I.-K. Oh, S.F. Bent
	Random sequential adsorption simulations of small molecule inhibitor packing during area-selective atomic layer deposition	I. Tezsevin, J. Li, M.J.M. Merkx, W.M.M. Kessels, T.E. Sandoval, A.J.M. Mackus -
	Atomic-scale Simulation Frameworks for ASD	T. Gunst, S.K. Natarajan, A. Blom
	Area Selective Deposition of HfO2 through ALD and Selective ALE Supercycles	L. Keller, S.K. Song, G. Parsons V. Wang, M. Breedon, N. Ashburn, M. Bergschneider, J. Speigelman H. Simka, K. Cho, A. Kummel
	Role of Dose Optimization in Ru ALD for Low Resistivity Films	Y. Cho, H. Huang, C. Ahles, K. Wong, S.D. Nemani, E. Yieh, A. Kummel
	Selective Water-Free Chemical Vapor Deposition of HfO2/TiO2 nanolaminate for nanoscale patterning Dual-Material Area-Selective Depositions for Advanced Nanopatterning: Poly(3,4-ethylenedioxythiophene) (PEDOT) and Tungsten (W) on Si-H/SiO2 Substrates	H. Oh, J.S. Kim, G.N. Parsons I. Singh, A.J. Veinot, J. Lomax, P.G. Gordon, E. Goodwin, S.T. Barry, P.J. Ragona, C.M. Crudden
	N-heterocyclic Carbene monolayers on Nobel and Non-noble metals	V. Wang, M. Breedon, N. Ashburn, M. Bergshneider, J. Speigelman, H. Simka, K. Cho, A. Kummel
	Role of Dose Optimization in Ru ALD for Low Resistivity Films	Y. Cho, J. Huang, C. Ahles, K. Wong, S.D. Nemani, E. Yieh, A. Kummel
<b>(6:30 PM)</b>	Selective Water-Free Chemical Vapor Deposition of HfO2/TiO2 Nanolaminate for Nanoscale Patterning	
	<b>Dinner</b>	

Time	Day II - Morning Session 9:00AM - 1:00PM	
	Breakfast 8:00-9:00 AM	Authors
	Opening Remarks	
<b>(9:00 AM)</b>	<i>ASD of Organic Materials - Moderator Adrie Mackus</i>	
	<b>Area Selective Etching of Polymers, a Novel Approach to Self- Aligned Patterning of Thin Films (Invited)</b>	<b>M. Ritala</b>
	ASD of Conjugated Polymers: Direct Comparison of Selectivity via CVD vs. MLD	G.N. Parsons, J.S. Kim
	<b>Carbon Nanotube Selective Deposition (Invited)</b>	<b>P. Gopalan</b>
<b>(10:20 AM)</b>	<i>Advanced ASD Processes (Supercycles and Patterning) - Moderator Boram Lee</i>	
	Intrinsic Area-Selective Atomic Layer Deposition of Gallium Nitride in Purely Thermal Mode	B.Y. van der Wel, A.A.I. Aarnink, A.Y. Kovalgin
	Direct Patterning of ZnO Deposition by Atomic-Layer Additive Manufacturing Using a Safe and Economical Precursor	S. Stefanovic, N. Gheshlaghi, D. Zanders, I. Kundrata, A. Devi, S. Barry, J. Bachmann
	Low Temperature Area Selective Deposition via Simultaneous Deposition and Etching	H.R.M. Margavio, N. Arellano, J. Kim, G.N. Parsons
<b>(11:20 AM)</b>	<b>Lunch Break (11:20-1:30 PM)</b>	
	Day II - Afternoon Session 1:30PM - 4:00PM	
<b>(1:30 PM)</b>	<i>Inhibitor Free ASD Processes (Part I) - Moderator Mark Saly</i>	
	<b>Pulsed CVD of TiO2/Al2O3 and HfO2/Al2O3 Nanolaminates on Si and SiO2 in Preference to SiCOH</b>	<b>A. Kummel</b>
	Area-Selective Atomic Layer Deposition of Ge2Sb2Te5 on Nanopatterned Substrate	J. Sinha, L. Gallis, J.W. Clerix, L. Nyns, A. Delabie
	Selective Deposition of Dielectric on Dielectric using Low Temperature ALD SiO2 from a Hologen-free Precursor	G. Liu, R. Kanjolia, M. Potyen, J. Woodruff, B. Zope, H. Chandra, X. Lei
	Concluding Remarks (Mark Saly)	
<b>(2:40 PM)</b>	<b>Coffee Break (15 minutes)</b>	
	<i>Inhibitor Free ASD Processes (Part II) - Moderator Greg Parsons</i>	
<b>(2:55 PM)</b>	<b>Inhibitor Free Nucleation Inhibition of Superconductors (Invited)</b>	
		<b>D. Farmer</b>
	Area Selective Atomic Layer Deposition of Palladium via Area Activation	H. Nallan, X. Yank, J. Ekerdt
<b>(3:45 PM)</b>	<b>Panel Discussion - Panel Topic – ASD with CVD vs. ALD (45 minutes) – Moderator Stacey Bent</b>	
	<i>Gregory Parsons (NCSSU), Robert Clarke (TEL) &amp; Staci Moulton (Forge Nano)</i>	
<b>(4:30 PM)</b>	Concluding Remarks (Chair)	