

Day 1		April 6 -	SCHEDULE FINAL VERSION 03232021	
All Times are Central Daylight Time				
	Session 1	Chair	Greg Parsons (North Carolina State University)	
	10:00 AM	Welcome	John Ekerdt (University of Texas at Austin)	
	10:10 AM	Invited	Charles Wallace (Intel Corporation)	The Role and Requirements of Selective Deposition in Advanced Patterning
	10:30 AM	Contributed	James Engstrom (Cornell University)	Introducing Competition to Achieve Area Selective Deposition
	10:42 AM	Contributed	Tzu-Ling Liu (Stanford University)	Area-Selective Atomic Layer Deposition on Chemically Similar Materials
	10:54 AM	Contributed	Marceline Bonvalot (LTM-CNRS CEA-LETI)	New strategy for topographically selective deposition by low temperature ion-assisted plasma enhanced atomic layer deposition
	11:06 AM	Q&A		
	11:21 AM	Break		
	Session 2	Chair	Andrea Illiberi (ASM)	
	11:30 AM	Invited	Kavita Shah (Nova)	Measuring What Matters: Wafer-Scale Metrology for Area Selective Deposition
	11:50 AM	Contributed	Tae Cho (University of Michigan)	Area-Selective Atomic Layer Deposition Patterned by Electrohydrodynamic Jet Printing for Additive Nanomanufacturing of Functional Materials and Devices
	12:02 PM	Contributed	Cheng Wang (Lawrence Berkeley National Lab)	Advancing Spatiochemical Metrology via Resonant Soft X-rays
	12:14 PM	Contributed	Padraic O'Reilly (Molecular Vista)	PiFM – Nanoscale Chemical Mapping via AFM-IR for Area Selective Deposition
	12:26 PM	Q&A		
	12:41 PM	Break		
	Session 3	Chair	Dennis Hausmann (Lam)	

	12:50 PM	Invited	Ainhoa Romo Negreira (Tokyo Electron Europe)	Spin-on Self-assembled monolayers (SAMs) for enabling area selective deposition (ASD)
	1:10 PM	Contributed	Annelies Delabie (imec, KU Leuven)	Surface functionalization by dimethylamino-trimethylsilane and impact on adsorption and diffusion during area-selective deposition
	1:22 PM	Contributed	Marc Merx (TUE)	Area-selective ALD of TiN using aromatic inhibitor molecules for metal/oxide selectivity
	1:34 PM	Contributed	Takezo Mawaki (Tohoku University)	Analysis of Reaction and Decomposition of Isopropyl Alcohol on Copper and Copper Oxide Surfaces Toward Area-selective Processes
	1:46 PM	Q&A		
	2:00 PM	Poster Session		
			Nickolas Asburn (University of Texas at Dallas)	Role of surface catalytic reactions on area-selective atomic layer deposition of Co and Ru interconnect metals
			Stanko Branovic (University of Houston)	Electroless Pb Monolayer Deposition – Prelude for Further Advances in Electroless Atomic Layer Deposition
			Bart de Braaf (Eindhoven University of Technology)	Nucleation and Growth in Localized Thermal Atomic Layer Deposition
			Lanxia Cheng (EMD Electronics)	Area Selective Deposition of Dielectrics using Multilayer SAM as Surface Passivation
			Seunghwan Lee (Hanyang University)	Area-Selective Atomic Layer Deposition by 2D-like Carbon Fabricated by Molecular Layer Deposition
			Caitlin McFeely (Dublin City University)	Investigation into the effect of Molecular Weight on the Thickness of Polymer Brush Monolayers Suitable for Area Selective Deposition
			Fabian Pena (Sandia National Labs)	Reduced temperature preparation of atomically clean Si surfaces to augment CMOS with atomic precision devices
			Jeffrey Woodward (U.S. Naval Research Laboratory)	Area Selective Deposition Studied Using Grazing Incidence Small Angle X-ray Scattering
			Chengwu Zhang (University of Connecticut)	Optical Response of Plasmonic Nanoantenna Dimer Arrays with Sub-10 nm Nanogaps by Area Selective ALD
	3:00 PM	END OF DAY 1		

Day 2		April 7 -		
	Session 4	Chair	Ravindra Kanjolia (EMD Electronics)	
	10:00 AM	Welcome	Stacey Bent (Stanford University)	
	10:10 AM	Invited	Christopher Bates (UC Santa Barbara)	Selective Spin-on Polymer Coatings
	10:30 AM	Contributed	Marcel Junige (University of Colorado at Boulder)	Area-Selective Molecular Layer Deposition of Nylon 6,2: Growth on Carbon and Inhibition on SiO ₂
	10:42 AM	Contributed	Junsik Kim (North Carolina State University)	Substrate Selectivity of Poly(3,4-ethylenedioxythiophene) by Oxidative Molecular Layer Deposition
	10:54 AM	Contributed	Sarah Tymek (University of Erlangen)	Direct deposition of high-resolution 3D nanostructures by Atomic-Layer Additive Manufacturing (ALAM)
	11:06 AM	Q&A		
	11:21 AM	Break		
	Session 5	Chair	Shashi Vyas (Intel)	
	11:30 AM	Invited	Fabio Grillo (ETH Zurich)	When surface diffusion matters more than adsorption
	11:50 AM	Contributed	Henrik Pedersen (Linkoping University)	ASD of Metallic Films using Plasma Electrons as Reducing Agents
	12:02 PM	Contributed	Himamshu Nallan (University of Texas at Austin)	Low Temperature Area-Selective Deposition of Palladium via Atomic Layer Deposition
	12:14 PM	Contributed	Rohit Narayananan Kavassery Ramesh (Colorado School of Mines)	Area Selective Atomic Layer Deposition of SiO ₂ using Fluorothiol Multilayers on Cu in an ABC-Type Cycle
	12:26 PM	Q&A		
	12:41 PM	Break		
	Session 6	Chair	Kavita Shah (Nova)	
	12:50 PM	Invited	Shashank Misra (Sandia National Labs)	Expanded toolkit for atomic precision advanced manufacturing
	1:10 PM	Contributed	Alfredo Mameli (TNO-Holst Centre)	High-Throughput Area-Selective Spatial Atomic Layer Deposition of SiO ₂ with integrated etching correction steps for low defectivity

	1:22 PM	Contributed	Wangxing Xu (Colorado School of Mines)	Area-selective Atomic Layer Deposition of Al ₂ O ₃ on SiN _x over SiO ₂
	1:34 PM	Contributed	Ghewa Akiki (LPICM-CNRS, Ecole Polytechnique, France)	Role of Fluorinated Precursor in Area Selective PECVD of Silicon on SiO _x Ny
	1:46 PM	Q&A		
	2:00 PM	Poster Session		
			Nickolas Asburn (University of Texas at Dallas)	Role of surface catalytic reactions on area-selective atomic layer deposition of Co and Ru interconnect metals
			Stanko Branovic (University of Houston)	Electroless Pb Monolayer Deposition – Prelude for Further Advances in Electroless Atomic Layer Deposition
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			Lanxia Cheng (EMD Electrons)	Area Selective Deposition of Dielectrics using Multilayer SAM as Surface Passivation
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			Chengwu Zhang (University of Connecticut)	Optical Response of Plasmonic Nanoantenna Dimer Arrays with Sub-10 nm Nanogaps by Area Selective ALD
	3:00 PM	END OF DAY 2		

Day 3		April 8 -		
	Session 7	Chair	Mark Saly (Applied)	
	10:00 AM	Welcome	Mark Saly	
	10:10 AM	Invited	Amy Walker (University of Texas at Dallas)	Building a New Materials Toolkit: Using Surface Chemistry to Direct the Morphology and Deposition of Thin Films and Nanoobjects

	10:30 AM	Contributed	Tamar Segal-Peretz (Technion - Israel Institute of Technology)	Metal oxide heterostructures via selective and spatially controlled growth within polymer templates
	10:42 AM	Contributed	Xin Yang (University of Texas at Austin)	Area Selective Atomic Layer Deposition of Sn(0) as an Etch Barrier
	10:54 AM	Contributed	Jan-Willem Clerix (imec)	300 mm-Wafer Characterization of Ruthenium Area-Selective Deposition in Nanoscale Line-Space and Hole Patterns
	11:06 AM	Q&A		
	11:21 AM	Break		
	Session 8	Chair	Erwin Kessels (Eindhoven University of Technology)	
	11:30 AM	Invited	Ravi Kanjolia (EMD Electronics)	Strategies for Area Selective Deposition: From Inherently Selective Precursors to Inhibitor Molecules and Processes
	11:50 AM	Invited	Tania Sandoval (Universidad Técnica Federico Santa María)	Effect of precursor dimerization in area-selective atomic layer deposition
	12:10 PM	Contributed	Bonggeun Shong (Hongik Univerisity)	Machine learning-based screening of the precursors for area-selective atomic layer deposition
	12:22 PM	Q&A		
	12:40 PM	Break		
	Session 9	Moderator	Rudy Wojtecki (IBM)	
	12:50 PM	Panel Discussion		
		Panelists	Milind Weling (EMD Electronics)	
			Robert Clark (TEL)	
			Annelies Delabie (imec)	
			Adrie Mackus (Eindhoven University of Technology)	
			Anuja DeSilva (Lam)	
	1:50 PM	Concluding Remarks		
			John Ekerdt / Stacey Bent	

	2:00 PM	END OF WORKSHOP	
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