MNE2015 Scientific Program

	Tuesday Morning 22 September 2015				
830	WF Theatre Chairs: Kees Hagen and Urs Staufer (TU-Delft, NL) Opening				
900	Tue-Keynote-1		Nano-Lithography		
	'WF Theatre' Chair: Kees Hagen (TU-De	lft, NL)	Pieter Kruit		
930	Tue-Keynote-2 Nano Fountain Probe Technology for <i>In Vitro</i> Single Cell Studies			Studies	
	'WF Theatre' Chair: Urs Staufer (TU-Delft, NL) Horacio Espinosa				
1030		Break and Openin	g of the Exhibition		
	A3. Electron and Ion Beam	B4. 3D Micro Manufacturing	C1.1. MEMS/NEMS Sensing 1	D5. System Design and	
	Lithography	and Micro Printing		Fabrication	
	Chair: J. Alexander Liddle (NIST, USA)	Chair: Massimo Gentili (Fondazione	Chair: Sternberg Andris (Univ. of Latvia,	Chair: Joan Bausells (CSIC, ES)	
		Bruno Kessler, IT)	LV)		
	'Amazon'	'Yangtze'	'WF Theatre'	'Mississippi'	
1100	Tue A3-c1	Tue-B4-c1	Tue-C1-c1	Tue-D5-inv	
	Optimization of electron beam	Inversed pyramid-shaped cave arrays	Fabrication, characterisation and	Technologies for point-of-care	
	lithographic exposure of PMMA	with nano-opening cap fabricated by	behaviour of very low-power gas	diagnostics	
	implantation masks with high aspect	laser interferometric lithography and	sensing devices based on single	M. Irmscher et al.	
	ratio covering a topographic step	wet etching	nanowires		
	Jens Bolten et al.	Weijie Sun et al.	J. Samà et al.		
1115	Tue A3-c2	Tue-B4-c2	Tue-C1-c2		
	Toward Less Than 50 nm-Line and	Novel Open Channel Microneedle	Integration of ZnO nanostructures onto		
	Space Negative Tone Pattern	Array Fabrication by 3D Laser	a micro hot plate for gas sensing		
	Fabrication by Electron Beam	Lithography and Micromoulding	A. Tommasi et al.		
	Lithography using NEB-22	Techniques			
	Makoto Okada et al.	Zahra Faraji Rad et al.			
1130	Tue A3-c3	Tue-B4-c3	Tue-C1-c3	Tue-D5-c1	
	Characterization for the photomask	High throughput fabrication of	Integrated smart gas flow sensor with	Fabrication of a smart contact lens	
	fabrication based on a novel technique	hierarchical photonic nanostructures	2.6 mW total power consumption and	platform for the diagnosis of dry eye	
	of high-resolution with a non-	N. Schneider et al.	80 dB dynamic range	disease	
	chemically amplified resist and a post-		Massimo Plotto et al.	Sajina Tinku et al.	
	Hidotatsu Miyoshi ot al				
11/15		Tue-B4-c4	Tue-C1-c4		
1145	Focused ion beam current density	Eabricating high density metal	Elevible Magnetoresistive Devices with	Top-down Zinc Oxide Nanowires by Ion	
	profile derivation from single crystal	structures using a six-fold line	High-Performance Sensors	Beam Etching for Biosensing	
	amorphization region widths – analysis	multiplying scheme	H. Fonseca et al.	Applications	
	method	J. Bosgra et al.		Kai Sun et al.	
	Yuval Greenzweig et al.				
1200	Tue A3-c5	Tue-B4-c5	Tue-C1-c5	Tue-D5-c3	
	Proximity Effect Quantification and	Monolithic micro-optical components:	High Frequency self-sensing	On-chip glass microfluidic trap and	
	Dose Optimisation for High Resolution	advancing from novel master	piezoresistive SPM cantilevers with a	storage of helical magnetic microrobot	
	Helium Ion Beam Lithography	fabrication methodology towards high-	novel design	Barbot Antoine et al.	
	Xiaoqing Shi et al.	volume manufacturing schemes	W. Engl et al.		
		L. Jacot-Descombes et al.			
1215	Tue A3-c6	Tue-B4-c6	Tue-C1-c6	Tue-D5-c4	
	Fabrication of metallic nanostructures	An effective approach for reducing	MEMS mechanism for resonance	Fast and Large Area Fabrication of	
	by character projection based electron	surface roughness of PMMA in	frequency tuning	Hierarchical Super Hydrophobic Silicon	
	beam lithography and hard mask lift-	grayscale EBL by thermal radiation	Nao Takeda et al.	Surfaces	
	off technique	Induced local reflow		Ghio S. et al.	
1220.42	l lorsten Harzendorf et al.	junen Xulet al.	in the Fultilities Area		
1230-13	L230-1330 Lunch Break, lunch served in the Exhibition Area				

	Tuesday Afternoon 22 September 2015			
	A5. Materials for lithography,	B3. Electron/Ion Beam	C1.2. MEMS/NEMS Fabrication	D6. Applications
	Chair: Robert Kirchner (PSI, CH)	technologies, applications Chair: Claus J. Burkhardt (NMI, DE)	Chair: Rebecca Cheung (Univ. of Edinburgh, UK)	Chair: Luigi Sasso (TU Delft, NL)
	'Amazon'	'Yangtze'	'WF Theatre'	'Mississippi'
1330	Tue-A5-inv Resist material options for extreme ultraviolet lithography T. Kozawa	Tue-B3-c1 Mimicking the iridescent color of free- standing Morpho butterfly wing scales fabricated by e-beam lithography Sichao Zhang et al.	Tue-C1-c7 Fabrication of a freestanding nanofluidic gas channel between two metal membranes G.J. Rademaker et al.	Tue-D6-inv Semiconductor Nanowires, a Promising Tool for Cell Sensing C.Prinz
1345		Tue-B3-c2 Nanomagnets as building blocks of logic gates - 3D nano manufacturing of nanomagnet assemblies by electron beam induced deposition H.D. Wanzenboeck et al.	Tue-C1-c8 Hydrothermal growth of c-axis nanorod-based ZnO films for SAW sensing applications G. Rius et al.	
1400	Tue-A5-c1	Tue-B3-c3	Tue-C1-c9	Tue-D6-c1
	Characterization of the anisotropy of	Photoluminescence Emission from a	Effect of fluorine surface modification	Cell Direction Switching and Metastasis
	semi-crystalline polymers after	nanofabricated Scanning Probe Tip	on resonance of a carbon	Screening by Designed Topography

	ellipsometry	Made of Epitaxial Germanium M.Bollani et al.	dual-beam lithography	S.F. Zhou et al.
	Si Wang et al.		R. Kometani et al.	
1415	Tue-A5-c2 Highly extended PDMS stamp life-time enabled by the new organic photo- curable soft NIL resist "mr-NIL210" Martin Messerschmidt et al.	Tue-B3-c4 Parallel imaging in a 196-Beam SEM Y.Ren et al.	Tue-C1-c10 Mass sensor utilising the mode- localisation effect in an electro- statically-coupled MEMS resonator pair fabricated using an SOI process Graham S. Wood et al.	Tue-D6-c2 Substrate-Independent Immobilization of Monolayer Metal Nanoparticles Array via Self-Assembly for Efficient Antibiofilm Coatings Shang-Yi Yi et al.
1430	Tue-A5-c3	Tue-B3-inv	Tue-C1-c11	Tue-D6-c3
	Pattern collapse mitigation in inorganic resists via a polymer freeze technique Tero S. Kulmala et al.	Focused electron beam induced deposition of metallic binary alloy nanostructures employing a heteronuclear precursor	Novel Saw Tooth Gate for Stiction and Pull-in Voltage Controlled Ohmic Silicon NEMS Switch L. Boodhoo et al.	In situ protein crystallization on microfabricated chips for serial crystallography. Nadia Opara et al.
1445	Tue-A5-c4 Multiphoton Laser Ablation Lithography (MP-LAL) using 375 nm Continuous Wave Laser Enabling Patterning down to the 30 nm Regime and beyond T. Manouras et al.	M. Huth et al.	Tue-C1-c12 Exposing the tribological run-in of polysilicon MEMS sidewalls in sliding contact using in-situ force measurements with AFM-like resolution Jaap Kokorian et al.	Tue-D6-c4 Rapid Prototyping for Microfluidics and Neuro-Engineering Anthony Leonard et al.
1500-15	30	Break/Ex	khibition	
1530		Poster session 1 (even numbe	rs) / Exhibition Until 1800	
	Special session S1. Single Nanometer Manufacturing (SNM) Chair: Ivo Rangelow (TU-Ilmenau) 'Amazon'			Special session S2. Chemistry for ELectron Induced NAnofabrication (CELINA) Chair: Ivo Utke (EMPA, CH) (Mississioni)
1700	Tue-S1-c1			Tue-S2-c1
	Introduction to Single Nanometer Manufacturing for beyond CMOS devices (SNM) Ivo W. Rangelow			Chemistry for Electron Induced Nanofabrication: Introduction to COST Action CM1301 – CELINA Petra Swiderek et al.
1705	Tue-S1-c2 Charged particle single nanometer nanofabrication Philip Prewett Tue-S1-c3			Tue-S2-c2 Focused electron beam induced processing (FEBIP) as maskless 3D direct-write nanolithography platform H.D. Wanzenboeck et al.
1735	Thermal and Oxidation Scanning Probe Lithography Felix Holzner			Tue-S2-c3 Focused electron induced processing in a surface science approach
1745	Tue-S1-c4 Single nanometer pattern transfer Mike Cooke	ford of one	•••••••••••••	Hubertus Marbach
1805	Tue-S1-c5 3D-AFM/Metrology for sub 3nm Marijn van Veghel			Tue-S2-c4 Shape control in high resolution Electron Beam Induced Deposition S. Hari et al.
1820				Tue-S2-c5
1825	Tue-S1-c6 Sub-10nm device development within the SNM Project Zahid Durrani			Focused electron and ion beam induced deposition on flexible and transparent polycarbonate substrates J. M. de Teresa et al. Tue-S2-c6
1845	End of Special session S1			The SEM as reaction chamber: developing nanogranular Pt-C additive chemistry on the nanometer scale A.A.M. Al-Marashdeh et al.
1850				End of Special session S2

	Wednesday Morning 23 September 2015			
830	Wed-Keynote-3 Development of block copolymers to create complex material nanopatterns			
	'WF Theatre' Chair: Dieter Kern (Univ. Tuebingen, DE) Michael Morris			
915		Reloc	cation	
	A6. Directed Self Assembly	B7. Metrology	C5.1. Micro and Nano devices	D3. Organ on a Chip
	Toulouse. FR)	Chair. Harm Knoops (10 Eindhoven, Ne)	for Physical Science -	Kong, HK)
			Computing	
	'Amazon'	'Yangtze'	(WE Theatre'	'Mississinni'
930	Wed-A6-c1	Wed-B7-c1	Wed-C5-inv	Wed-D3-c1
	Capture probability of assembly	Imaging and model simulation of	Evolution of Superconducting Quantum	Skin-on-chip : integration of skin tissue
	defects in 14 nm half-pitch line/space	trenches on a silicon surface in helium	Processors	and microsystems engineering
	DSA patterns H Pathangi et al	ion microscopy	Leonardo DiCarlo	Bergers Lambert et al.
945	Wed-A6-c2	Wed-B7-c2	•	Wed-D3-c2
	Ordering of either nano-dot arrays or	Diamond scanning probes with sub-		Microelectrode array with integrated
	nano-lines along EB-drawn resist guide	nanometer resolution for advanced		sieving structure for automated cell
	lines using PS-PDMS self-assembly with	nanoelectronics device characterization		positioning
	Sumio Hosaka et al.			B. Schurink et al.
1000	Wed-A6-c3	Wed-B7-c3	Wed-C5-c1	Wed-D3-inv
	Determination of the interfacial	Electric Fields in Scanning Electron	Quantum Cellular Automata: Design	Organs-on-chip by selective assembly
	energies in chemical guiding patterns	Microscopy Simulations	and Fabrication with the	of primary cells enabled by
	for directed self-assembly of block co-	K. T. Arat et al.	Nanodamascene Process	delectrophoresis in microfiuldic
	Laura Evangelio et al.			M.Stelzle
1015	Wed-A6-c4	Wed-B7-c4	Wed-C5-c2	
	Characterization of Half-pitch 15 nm	Using Piezoresponse Force Microscopy	Scaling and Integration of Memristive	
	Metal Wire Circuit Fabricated by	for semiconductor ZnO nanowires	Nanodevices Using Nanoimprint	
	Y. Kasahara et al.	G. Murno et al.	Shuang Pi et al.	
1030-11	00	Break/Ex	hibition	
	A7. Stencil and Tip Based	B8. Self Aligned Processes	C5.2. μ/nano - devices for	D2. Lab on Chip
	Patterning	Chair: Monika Fleischer (Univ.	Physical Science–Nano Tubes	Chair: Anja Boisen (DTU, DK)
	Chair: Pasqualantonio Pingue (Scuola	Tuebingen, DE)	and Nano Wires	
	Normale Superior PISA, IT)		Chair: Zahid Durani (Imperial College	
			London, UK)	
1100	Amazon Wed-47-c1	Wed-B8-inv	Wed-C5-c3	Wississippi
1100	Etching through nanostencils for high	Strategies for selective atomic layer	TEM study of Schottky junctions for	Microreactor with integrated micro-
	resolution and large-scale patterning of	deposition on patterned substrates	reconfigurable silicon nanowire devices	mixer and heated nebulizer for mass
	optical nanoantenna arrays	A.J.M.Mackus et al.	S. Banerjee et al.	spectrometric chemical reaction
	Valentin Flauraud et al.			analysis G. Scotti et al
1115	Wed-A7-c2	-	Wed-C5-c4	Wed-D2-c2
	Direct fabrication of thin film layer		Fabrication of a suspended silicon	Resealable flowcells with integrated
	MoS2 field-effect nanoscale transistors		nanowire single hole transistor by	oxygen sensing layers for enzymatic
	by oxidation scanning probe		focused ion beam implantation	reaction studies
	Francisco M. Espinosa et al.		J.LIODEL ET al.	Martina viennues et al.
1130	Wed-A7-c3	Wed-B8-c1	Wed-C5-c5	Wed-D2-c3
	Lift-off processes for avoiding substrate	Area selective growth of chalcogenide	GaAs/InSb core-shell nanowires and	Monolithically integrated photonic
	damage from charged particles during	materials onto patterned substrates by	InSb nanotubes	platform for Point-of-Need application
	IITnograpny Martin Snieser et al	Chemical vapor deposition	Torsten Rieger et al.	in rood sarety M Angelonoulou et al
1145	Wed-A7-c4	Wed-B8-c2	Wed-C5-c6	Wed-D2-c4
	Field Emission Scanning Probe	Nanocrystal Self-Assembly of CdSe/CdS	Fabrication and characterization of	A Capillary-Driven Microsystem for
	Lithography and Etching at Cryogenic	Hollow Domes in quasi contact-free	tunnel barriers in a multi-walled carbon	DNA Amplification Direct from Whole
	Temperatures – A Closed Loop	conditions	nanotube formed by focused ion beam	Blood Baniamin longs at al
	Device Manufacturing		H. Tomizawa et al.	benjamin jones et al.
	M.Kaestner et al.			
1200	Wed-A7-inv	Wed-B8-c3	Wed-C5-c7	Wed-D2-c5
	Advanced Scanning Probe Lithography	Fabrication of High-resolution, Self-	Improving the Double Layer	Periodic convection of superparamag-
	A.NIUI	Anglied Palladium Electrodes for	with Room Temperature Ionic Liquids	channel by interlocked, electroplated
		Laura Vera Jenni et al.	Abdurrahman Shougee et al.	structures activated by a static field
				Thies Jan-Wilhelm et al.
1145		Wed-B8-c4	Wed-C5-c8	Wed-D2-c6
		Crystallinity variations over the length	Optimization of 3-D N-channel Twin	Nanoimprinted photonic crystal slab
		grown by chemical vapour deposition	Izzati Omar et al.	monitoring
		S. Vollebregt et al.		Kristian Tølbøl Sørensen et al.
1230-13	-1330 Lunch Break, lunch served in the Exhibition Area			

	Wednesday Afternoon 23 September 2015				
	A1. Photo Lithography	C3. Meta Materials and their	C5.3. µ/nano-devices for	D4. Micro and Nanofluidics for	
	Chair: Paul Alkemade (TU Delft, NL)	Fabrication	Phys.Science - Instrumentation	Biology and Life Sciences	
		Chair: Anders Kristensen (DTU, DK)	and Imaging	Chair: Albert van der Berg (Univ.	
			Chair: Richard Koops (VSL, NL)	Twente, NL)	
	'Amazon'	'Yangtze'	'WF Theatre'	'Mississippi'	
1330	Wed-A1-c1	Wed-C3-inv	Wed-C5-c9	Wed-D4-c1	
	Towards Single Photon Lithography	Recent progress in hyperbolic, chiral	Dopant Imaging of Power	Preparation of highly porous PLGA	
	Hilde Hardtdegen et al.	and 3D metamaterials: Physics,	Semiconductor Device Cross Sections	microparticles using droplet fission and	
		Fabrication and Applications	U. Gysin et al.	gelatin porogen	
		Minkyung Kim et al.		Chul Min Kim et al.	
1345	Wed-A1-c2		Wed-C5-c10	Wed-D4-c2	
	Fabrication of high-aspect-ratio		Experimental system combined with a	SU-8 micro-pillars suspended on Si3N4	
	polarizers with Displacement Talbot		micromachine and double-tilt TEIVI	membranes: a supernydropno- bic cnip	
	Christian Dais et al		noider Takaaki Sato ot al	his soft matter	
				A Accardo et al.	
1400	Wed-A1-c3	Wavelength Selective Metamaterial	Wed-C5-c11	Wed-D4-c3	
	Through-Wafer Photolithographic	Absorber for Thermal Detectors	Microfabrication of an integrated	Active porous valves for droplet flow	
	Exposure for Control of Resist Sidewall	A. Shoshi et al.	photoconductive switch and Ultrafast	manipulation in open channel fluidics	
	Profile		Beam Blanker	N. Vourdas et al.	
	L. Wang et al.		Gerward Weppelman et al.		
1415	Wed-A1-c4	Wed-C3-c2	Wed-C5-c12	Wed-D4-c4	
	High coherency hybrid-ArF laser: An	Fabrication of Chiral-Molecular@ Nano	NV-center diamond cantilevers:	Microfluidic Chips for Studying Mass	
	application to interference lithography	particle Complex Materials with Great	extending the range of available	Transport across Permeable Vascular	
	Hiroaki Oizumi et al.	Chiroptical Effect in Visible Region	fabrication methods	Walls in Drug Delivery	
		Duan Xie et al.	J. Kleinlein et al.	Chiara Manneschi et al.	
1430		Relo	cation		
1445	Wed-Keynote-4	Advanced cer	ntrifugal microfluidics for Point-of-Care A	pplications	
1530	WF Meatre Chair: Ors Stauler (TO De	iit, NL)	Roland Zeligerie		
1550					
		Poster session 2 (odd	numbers) / Exhibition		
1000	-				
1800	End of poster session 2 / Individual transfer to Conference Dinner location 'Madurodam'				

	Thursday Morning 24 September 2015				
830	'WF Theatre' Award Ceremony				
	Chairs: Hubert Brückl (Danube University Krems , AT) MNE-Fellow (sponsored by ASML): Emile van der Drift				
	and Dieter Kern (Univ. Tuebingen, DE) Micro Electronic Engineering Young Investigator Award (sponsored by Elsevier): Stephan Keller				
	Thu-MNE-Fellow Quantitative technology, a joy forever				
015	'WF Theatre' Chair:	Dalas	Emile van der Drift		
915		Reloc		D4.4. Maskenisel Consist	
	A4.1. Soft Lithography 1	Young Investigator Award	C1.3. MEMS/NEWS for Energy	D1.1. Mechanical Sensing	
	Chair: Jens Gobrecht (PSI, CH)	lecture, Hot news - Late News	Harvesting	Elements	
		Session	Chair: Phil Prewett (OSC, UK)	Chair: Murali Ghatkesar (TU Delft, NL)	
		Chair: Evangelos Gogolides (Demokritos,			
		GR)		(
020	'Amazon'	'WF Theatre'	'Yangtze'	'Mississippi'	
930	Inu-A4-CI A new photo curable PDMS with	Riomatorial Microsystems for Drug	Inu-CI-CI Design and fabrication of transzoidal	Inu-DI-CI	
	excellent master replication fidelity for	Delivery and Bioelectrochemistry	organic micro-beams for mechanical	microchannel resonator for protein	
	fast fabrication of working stamps in	S.S. Keller et al.	energy harvesting from environment al	adsorption measurement operating at	
	soft UV-NIL applications.		sources	atmospheric pressure	
	Manuel W. Thesen et al.		H. Nesser et al.	J. Groenesteijn et al.	
945	Thu-A4-c2		Thu-C1-c2	Thu-D1-c2	
	Athermal nanoimprint lithography		AlN layers for bistable energy	Fabrication of holder-type	
	based on azobenzene resist		harvesting microdevices	plezoresistive cantilever for embryo	
	Christian Probst et al.		R. A. Dias et al.	mass measurement Havato Sone et al	
1000	Τομ-Δ4-c3	Hot News – Late News Session	Thu-C1-c3	Thu-D1-c3	
1000	Injection Moulding of hard and soft		Triboelectric nanogenerator with	The Helium Ion Microscope as an ideal	
	substrates with Micro- and		honeycomb-like nanofiber	complement of FIB technologies for	
	Nanostructures.		microstructures	one nanometre-scale graphene	
	Anwer Saeed et al.		Shin Jang et al.	nanopore fabrication	
		For program see App		J. Gierak et al.	
1015	Thu-A4-c4		Thu-C1-c4	Thu-D1-c4	
	High volume soft-stamp NIL, tooling		AIN-based flexible piezoelectric skin for	Iron Oxide Nanoparticle Assembly on	
	M A Verschuuren et al		Erancesco Guido et al	Daniel Schiffels et al	
1030-110	00	Break/Exh	ibition	Daniel Schillels et al.	
	A9. Novel Techniques	B1. Pattern Transfer	C1.4 MEMS/NEMS granhene	D1.2. Sensing Systems	
	Chair: Andrey Llobera (CSIC ES)	Chair: Banhael Taboryski (DTU, DK)	dovisos	Chair: Zoran Diuric (SASA_SBB)	
			Chair: Michel Despont (CSEM, CH)		
-	'Amazon'	'Yangtze'	'WE Theatre'	'Mississippi'	
1100	Thu-A9-inv	Thu-B1-c1	Thu-C1-c5	Thu-D1-inv	
	Wafer scale 3D-nanofabrication based	SnOx high-efficiency EUV interference	Graphene membrane fabrication	Three-dimensional (3D) Scaffolds for	
	on retraction edge lithography, corner	lithography gratings towards the ultim-	methods for NEMS applications with	Bioartificial Organ-on-a-Chip Systems	
	lithography and anisotropic wet	ate resolution in photolithography	sealed cavities	and Bioelectroanalysis	
	etching of silicon	Elizabeth Buitrago et al.	S.Wagner et al.	S. Mohanty et al.	
1115	Erwin J.W. Berenschöt et al.	Thu-B1-c2	Thu-C1-c6		
		High aspect ratio nanopatterning for x-	Modification of boronnitride-encapsula		
		ray diffractive optics	ted graphene using a focused He beam		
		Richard C. Tiberio et al.	Gaurav Nanda et al.		
1130	Thu-A9-c1	Thu-B1-c3	Thu-C1-c7	Thu-D1-c5	
	Development of Paper-based	Effects of thermal nanoimprint	P3HT:PCBM and graphene inks for	Highly Sensitive Raman analysis and	
	Annlications	nroperties of PMMA: a comparison	L Kastner et al	vertical plasmonic papoantennas	
	Michael Cooke et al.	between standard NIL and ultrafast NIL		Michele Dipalo et al.	
		Michele Pianigiani et al.			
1145	Thu-A9-c2	Thu-B1-c4	Thu-C1-c8	Thu-D1-c6	
	High aspect ratio 10-nm-scale	Patterning of diamond like carbon films	Piezoresistive transduction of	Fast prototyping of plastic microfluidic	
	nanoaperture arrays with template-	using silicon containing thermoplastic	graphene-based	devices with Vis/IR transparent view-	
	guided metal dewetting	resist (SiPol) as hard mask	nanoelectromechanical systems	port for live cell imaging	
1200	Ying Min Wang et al.	D. Virganavicius et al.	Madhav Kumar et al.	Giovanni Birarda et al.	
1200	INU-A9-C3 Magnotic assombly of microsphores	Inu-B1-C5 Rolymor injection molding of bard V	Transfor Fron Fabrication of Large Area	Inu-D1-C/	
	into ordered two-dimensional arrays	ray refractive optics	Nanocrystalline Granhene	extraction device with flevible narylene	
	Kanna Aoki et al.	F. Stöhr et al.	Nanoelectromechanical Switch Array	microneedles	
			Jian Sun et al.	WH. Hung et al.	
1215	Thu-A9-c4	Thu-B1-c6		Thu-D1-c8	
	Approach for novel 3-dimensional	Pattern Fidelity in 3-D Structures during		Automated characterization of	
	imaging by built-in lens mask	Pattern Transfer from Atomically		Biopolymer Degradation with a Blu-Ray	
	lithography	Precise Templates		Readout Platform	
4000 10	Toshiki Tanaka et al.	Joshua B. Ballard et al.		Andrea Casci Ceccacci et al.	
1230-133	330 Lunch Break, lunch served in the Exhibition Area				

	Thursday Afternoon 24 September 2015			
	A4.2. Soft Lithography 2	B2. Plasma Etching	C2. Micro and Nano Fluidic	D1.3. Optical Sensing Elements
	Chair: Regina Luttge (TU-Eindhoven, NL)	Chair: Sandra Wolff (TU Kaiserslautern,	Systems	Chair: Massimo De Vittorio (Univ.
		DE)	Chair: Marko Blom (Micronit, NL)	Salento, IT)
	'Amazon'	'Yangtze'	'WF Theatre'	'Mississippi'
1330	Thu-A4-inv	Thu-B2-c1	Thu-C2-c1	Thu-D1-c9
	Photonic Crystals for visible light	Fabrication of shape memory / silicon	Effect of Different Fluids on Rectified	Microring resonator based evanescent
	fabricated by reverse nanoimprinting	bimorph nanoactuators	Motion of Leidenfrost Droplets on	field sensor with homogeneously
	of a high refractive index material	Franziska Lambrecht et al.	Micro/Sub-Micron Ratchets	integrated P-I-N detector
	C. Pina-Hernandez et al.		Jeong Tae Ok et al.	Alina Samusenko et al.
1345		Thu-B2-c2	Thu-C2-c2	Thu-D1-c10
		Supercritical CO2 etching of metal thin	Lateral porous silicon membranes	Monitoring of the extracellular changes
		films for magnetoresistive memory	fabricated within 2D microchannels	in the cell medium by SERS analysis
		processing	through local ion implantation	Victoria Shalabaeva et al.
		Md Rasadujjaman et al.	Yingning He et al.	
1400	Thu-A4-c5	Thu-B2-c3	Thu-C2-c3	Thu-D1-c11
	Smart elastomer substrates for flexible	Plasma Directed Assembly: A non-	Luminescent and absorptive metal-	Fabrication and application of ultrathin
	systems	lithographic nanoassembly technology	coated droplets for micro-velocimetry	gold nanohole films as complementary
	Rian Seghir et al.	for polymeric nanodot and silicon	Olivier Mesdjian et al.	dual sensing platform
		nanopillar fabrication		Raphael F Tiefenauer et al.
		Athanasios Smyrnakis et al.		
1415	Thu-A4-c6	Thu-B2-c4	Thu-C2-c4	Thu-D1-c12
	Multiplexed microfluidic stamp inking	Low-damage cryogenic etch of porous	A novel piezo actuated high stroke	Label-free biosensing of ErbB2 protein
	for automated micro-contact printing	organosilicate low-k dielectric	polymer membrane for micropumps	marker detection by an organic
	process	L. Zhang et al.	Ardavan Shabanian et al.	distributed feedback laser based on
	Aurore Estève et al.			perylenediimide derivative
				Aritz Retolaza et al.
1430	Relocation to 'WF Theatre'			
1445	Thu-Keynote-5	Promises, Pro	blems, and Practicalities of Nanomateria	al Electronics
	'WF Theatre' Chair: Ageeth Bol (TU Eindhoven, NL) Aaron D. Franklin			
1530	'WF Theatre' Chair: Kees Hagen (TU Delft, NL) Closing remarks and Farewell			