

NNT'08 (October 13-15, 2008 Kyoto International Conference Center, Kyoto) Program

October 13, 2008

Registration (2F beside Room A) (16:30-18:30)

Welcom Party (Swan, 1F)

Welcome Party (18:00-20:00)

October 14, 2008

Registration (2F beside Room A) (8:30-18:00)

Room A

Chairpersons: Y. Hirai (Osaka Pref. Univ.), S.Y. Chou (Princeton Univ.)

Opening

Session No.	Start	End	Paper Title	Speakers	Affiliation
	9:00	9:05	Opening	M. Komuro	NNT'08 Chair, NEDO, Japan
	9:05	9:10	Opening Remarks	Y. Hirai	NNT'08 Program Chair, Osaka Pref. Univ., Japan

14A-1: Application I

14A-1-1	9:10	9:40	Patterned Media Fabrication with Nanoimprint Process (Plenary)	B.-K. Lee, D. Lee, E. Cho, H.-S. Kim, M.-B. Lee, J.-S. Sohn	Samsung Advanced Inst. of Technol., Korea
14A-1-2	9:40	10:00	Chemically Directed Block Copolymer Self-assembly for 10nm Scale Nano-Lithography (Invited)	H. Yoshida 1, Y. Tada 1, S. Akasaka 2, R. Ruiz 3, E. Dobisz 3, D. Kercher 3, M. Takenaka 2, H. Hasegawa 2, T.R. Albrecht 3	1 Hitachi, 2 Kyoto Univ., Japan and 3 Hitachi Global Storage Technologies, USA
14A-1-3	10:00	10:20	Nanomold Fabrication and Nanoimprint Anti-reflection Structures Utilized Blu-ray Disc Technology (Invited)	S. Endoh and K. Hayashibe	Sony, Japan
14A-1-4	10:20	10:40	3D Visualization of Molding Filling Stages in Thermal Nanoimprint (Invited)	H. Schiff 1, G. Kim 2, J.J. Lee 2, K. Vogelsang 1 and J. Gobrecht 1	1 Paul Scherrer Inst., Switzerland and 2 Korea Inst. of Machinery & Materials, Korea

Chairpersons: K. Asakawa (Toshiba), H. Kurz (Aschen Univ./AMO GmbH)

14A-2: Thermal Nanoimprint

14A-2-1	10:40	11:00	Quantitative Strategies to Handle Stamp Bending in NIL	R.H. Pedersen 1, L.H. Thamdrup 1, A.V. Larsen 1, A. Kristensen 1 and D.-A. Mendels 2	1 Tech. Univ. of Denmark, Denmark and 2 Cognoscens, France
14A-2-2	11:00	11:20	The Imprint Software: Quantitative Prediction of Process Parameters for Successful Nanoimprint Lithography	N. Kehagias 1,2, V. Reboud 1,2, C.M. Sotomayor Torres 1,3	1 Campus de Bellaterra, Spain, 2 Univ. College Cork, Ireland and 3 ICREA, Spain
14A-2-3	11:20	11:40	A Novel Analytical Model for Thermoplastic Deformation of Resist in Thermal Nanoimprintlithography	S. Choi, I. Park and A.P. Pisano	UCLA, Berkeley, USA
14A-2-4	11:40	12:00	Nanoimprint of Metallic Glasses	Y. Saotome, K. Amiya, Y. Shibata, A. Makino and A. Inoue	Tohoku Univ., Japan

Lunch (12:00-13:10)

Chairpersons: M. Komuro (NEDO), J. Guo (Univ. of Michigan)

14A-3: Production

14A-3-1	13:10	13:30	Considerlation of Nanoimprinting for Production (Invited)	J. Ahopelto	VTT Micro & Nanoelectron., Finland
14A-3-2	13:30	13:50	Industrial Imprint Lithography for High Volume Manufacturing Optoelectronic (Invited)	B. Heidari	Obducat, Sweden

Chairpersons: H. Hiroshima (AIST), C.G. Willson (Univ. of Texas)

14A-4: UV Nanoimprint

14A-4-1	13:50	14:10	Numerical Study on Bubble Trapping in UV Nanoimprint Lithography	D. Morihara 1, H. Hiroshima 2 and Y. Hirai 1	1 Osaka. Pref. Univ. and 2 AIST, Japan
14A-4-2	14:10	14:30	Nanoimprint Lithography for Sub-10 nm Complex Patterns	W. Wu 1, Q. Xia 1, D. Morecroft 2, J. Yang 2, K.K. Berggren 2, H. Ge 3, X. Li 1, S.-Y. Wang 1 and R.S. Williams 1	1 Hewlett-Packard, 2 MIT, USA and 3 Nanking Univ., China
14A-4-3	14:30	14:50	Duplication of Mold for Nanoimprint Lithography using reworkable UV Curing Resin	H. Wakayama, K. Mitsukura, H. Okamura, K. Suyama, Y. Hirai and M. Shirai	Osaka Pref. Univ., Japan
14A-4-4	14:50	15:10	Fabrication of Thin Film Pua Stamps with Micro and Nano Patterns by the UV-Nanoimprint Lithography Tools	S.Y. Park, Y.J. Kim, H.S. Jang and J.J. Lee	Korea Inst. of Machinery & Materials, Korea

Coffee Break (15:10-15:30)

POSTER SESSION (15:30-17:30)**Room B-1: Thermal Imprint / Process**

14B1-5-1	Impact of Ultrasonic Vibration on Room-Temperature Imprinting	H. Mekar and M. Takahashi	AIST, Japan
14B1-5-2	Short-Cycle Thermal Nanoimprint using Smart Stamps	R.H. Pedersen 1, K.H. Rasmussen 1, L.V. Lorenzen 1, C.J. Luscher 1, O. Hansen 1,2 and A. Kristensen 1	Tech. Univ. of Denmark, Denmark
14B1-5-3	Theoretical Study of Ultimate Resolution in Glass Nanoimprint Lithography	K. Tada, Y. Kimoto, M. Yasuda, H. Kawata and Y. Hirai	Osaka Pref. Univ., Japan
14B1-5-4	Fabrication of Partition Wall for Solar Cell by Hot Embossing	J.S. Kim, S.K. Hong, J.D. Kim, J.J. Kang and C.J. Hwang	Korea Inst. of Industr. Technol., Korea
14B1-5-5	Profiling of a Poly(Styrene) Residual Layer in Hot Emboss using a mm-scale Mold by a Reflective Thickness Monitor	K. Nagase and M. Nakagawa	Tokyo Inst. of Technol., Japan
14B1-5-6	Fracture Mechanism of Glass Forming using Imprinting Process	Y.M. Hung and C.K. Sung	Natl. Tsing Hua Univ., Taiwan
14B1-5-7	Gold Nanowires Imprinted by Hot-Embossing on Parylene-C/Polyimide and Hydrogen Silsesquioxane	C.-C. Hsu, L.-W. Cheng and F.-S. Huang	Natl. Tsing Hua Univ., Taiwan
14B1-5-8	Contact Angles in Thermal Imprint	N. Bogdanski, S. Mollenbeck and H.-C. Scheer	Univ. of Wuppertal, Germany
14B1-5-9	Importance of Mold Pattern Profile and Resist Thickness for Demolding Force	M. Matsue, K. Kubo, H. Kawata, M. Yasuda and Y. Hirai	Osaka Pref. Univ., Japan
14B1-5-10	Process Time in Glass Nanoimprint	Y. Kimoto 1, M. Shibata 1, T. Mori 2, H. Kasa 3, J. Nishii 3 and Y. Hirai 1	1 Osaka Pref. Univ., 2 Konica Minolta Opto and 3 AIST, Japan
14B1-5-11	Impact of Process Conditions Temperature on Adhesion and Friction Forces in Thermal NIL	T. Tanabe 1, D. Jarzabek 2, M. Matsue 1, H. Kawata 1, Z. Rymuza 2 and Y. Hirai 1	1 Osaka Pref. Univ., Japan and 2 Warsaw Univ. of Technol., Poland
14B1-5-12	Process and Polymer Design for Rapid Thermal NIL	M. Shibata, T. Tanabe, H. Kawata and Y. Hirai	Osaka Pref. Univ., Japan

Room B-1: Thermal Imprint / Material

14B1-5-14	Imprint and Pattern Transfer of Silica Sol-Gel Resist: A Powerful Nanofabrication Approach	C. Peroz 1,2, A. Chang 2, B. Harteneck 2, S. Dhuey 2, D. Olynick 2 and S. Cabrini 2	1 Abeam Technol. and 2 The Molecular Foundry, USA
	Gas Phase Deposition of Anti-Sticking Layers for NIL	H.-C. Scheer, A. Fidler, W.	Univ. of Wuppertal, Germany

14B1-5-15		Hafner, S. Mollenbeck and N. Bogdanski	
14B1-5-16	Rheological Characterisation and Tuning of Polymers for Nanoimprint Lithography	I.G. Romero, F. Reuther, M. Fink and G. Gruetzner	Micro Resist Technol., Germany
14B1-5-17	Low Temperature Imprinting of Polyimide and Carbon Nanotube Composites with the Assistance of Residual Solvents and Precursor Material	E. Itoh, S. Tamura, K. Ishiyama, Y. Sano and K. Miyairi	Shinshu Univ., Japan
14B1-5-18	Photo-Induced Chemisorption of Poly(Styrene) Resist Suppressing Partial Filling in Thermal Nanoimprint Lithography	H. Oda 1, T. Ohtake 2, T. Takaoka 2 and M. Nakagawa 1	1 Tokyo Inst. of Technol. and 2 NOF, Japan
Room B-1: Tools			
14B1-5-19	Examination of a Floor Cushion Process which Improves Residual Film Thickness Uniformity	A. Sekiguchi 1, Y. Kono 1 and Y. Hirai 2	1 Litho Tech Japan Corp. and 2 Osaka Pref. Univ., Japan
14B1-5-20	Development of a Microcontact Printer for A4-sized Sheets	H. Fujita 1,2, M. Nagae 1,2, T. Takahashi 2, H. Mogi 1,3, H. Ushijima 4 and K. Yase 4	1 Japan Chemical Innovation Inst., 2 Dai Nippon Printing and 3 Shin-Etsu Chemical and 4 AIST, Japan
Room B-1: Application Strage & Electronics			
14B1-5-21	NIL Mold for Bit Patterned Media Fabricated by Block Copolymer Template	H. Hieda, N. Kihara and K. Naito	Toshiba, Japan
14B1-5-22	Template Replication using a Tone-Reversal Imprint Process for Patterned Magnetic Recording Media	H. Wang, Z. Yu, M. Feldbaum, N. Kurataka, Y. Hsu, G. Gauzner, D. Weller, D. Kuo and K. Lee	Recording Media Operations, USA
14B1-5-23	Control of Location, Diameter, Length, and Orientation of Si Nanowire Grown on Amorphous Substrate Using Nanoimprint Lithography and Novel Catalysts	C. Wang, P. Murphy and S.Y. Chou	Princeton Univ., USA
14B1-5-24	Resistance Random Access Memory Fabricated by Nanoimprint Lithography	H. Jung, H. Choi, J. Yoon, H. Hwang and G-Y. Jung	Gwangju Inst. of Sci. and Technol., Korea
14B1-5-25	Fabrication of a-Si Nano-Wires using UV Nano-Imprint Lithography and its Crystallization Characteristics	G. Nakagawa and T. Asano	Kyushu Univ., Japan
14B1-5-26	One Step Printing of Multiple Biomolecules using a Nanostructured Macrostamp	Jean-Christophe Cau 1, Franck Carcenac 1, Nathalie Marsaud 2, Helene Lalo 1, Veronique Leberre 2, Jean-Pierre Peyrade 1, Jean-Marie Francois 2 and Christophe Vieu 1	1 Toulouse Univ. and 2 Genopole Toulouse, France
14B1-5-27	Nanoimprint Lithography: A General Tool for the Fabrication of (Bio)Functional Assemblies: Study Case Light Harvesting Antenna Complexes	M. Escalante 1, Y. Zhao 1, M.J.W. Ludden 1, R. Vermeij 1, J.D. Olsen 2, E. Berenschot 1, C.N. Hunter 2, J. Huskens 1, V. Subramaniam 1 and C. Otto 1	1 Univ. of Twente, The Netherlands and 2 Univ. of Sheffield, UK
14B1-5-28	Roll-to-Roll Processing of Fluidics Channels on Plastic Web	T. Makela 1,2, T. Haatainen 1, P. Majander 1 and J. Ahopelto 1	1 VTT Micro & Nanoelectron. and 2 Abo Akademi Univ., Finland
Room B-1: Soft Lithography			
14B1-5-29	PDMS Molding for High-Aspect-Ratio Subwavelength Microstructures	Y.-Y. Su 1, S.-J. Lin 1, M.-K. Wei 1, W.-L. Lai 2, H.-Y. Lin 2, J.-H. Tsai 2 and T.-C. Wu 2	1 Natl. Dong Hwa Univ. and Industr. Technol. Res. Inst., Taiwan
14B1-5-30	Local Work Function Control of Indium Tin Oxide by Micro Contact Printing	T. Watanabe and M. Fujihira	Tokyo Inst. of Technol., Japan
14B1-5-31	Molecular Patterns Produced by Soft Lithography using PDMS Stamps with Self-Organized Surface Features	H. Lalo 1,2 and C. Vieu 1	1Toulouse Univ. and 2 Parc d'acticitte Activestree, France
14B1-5-32	Fabrication of 3D Structures by Micro Contact Printing on Topography	I. Bergmair 1,2, M. Muhlberger 1, W. Schwinger 1, K. Hingerl 2, R. Schoftner 1	1 Profactor and 2 CD Lab. of Surface Optics, Austria
14B1-5-33	Printing of Catalytic Nano-Particles for CNT-Growth	W. Schwinger 1, I. Bergmair 1, M. Muhlberger 1, M. Bodnarchuk 2,3, M. Kovalenko 2,3, R.	1 Profactor, Austria, 2 Univ. of Chicago, USA, 3 Johannes Kepler Univ., Austria, 4 Tech.

		Haubner 4, E. Lausecker 1,5, W. Heiss 3 and R. Schoftner 1	Univ. Vienna, Austria and 5 Princeton Univ., USA
14B1-5-34	The Direct Nano-Patterning Method of ZnO using Nanoimprint Lithography with ZnO-Sol and Thermal Annealing Process	K.-Y. Yang, K.-M. Yoon and H. Lee	Korea Univ., Korea
14B1-5-35	Replication of Dot-like Arrowhead Structures	S. Mollenbeck 1, N. Bogdanski 1, H.-C. Scheer 1, J. Zajadacz 2 and K. Zimmer 2	1 Univ. of Wuppertal and 2 Leibniz Inst. for Surface Modification, Germany
Room B-1: Mold			
14B1-5-36	Large Area Seamless Quarts Mold by Scanner Lithography	T. Isano, Y. Kaneda, K. Asano and T. Hoshi	Canon, Japan
14B1-5-37	Ni-Nanostructured Mold with Atmosphere Plasma Surface Treatment for Roller Nanoimprint	F.-Y. Chang 1,2, T.-L. Chang 1, W.-L. Lai 1, Y.-J. Huang 1, T.-H. Chou 1, H.-P. Yang 1, C.-W. Chen 1, C.-J. Wu 1, H.-Y. Lin 1 and J.-H. Tsai 1	1 Industr. Technol. Res. Inst. and 2 Natl. Taiwan Univ. of Sci. & Technol., Taiwan
14B1-5-38	Imprint Mask Infrastructure for the 32nm Node and Beyond	K. Selinidis, E. Thompson, G. Schmid, J. Maltabes, I. McMackin, N. Stacey, S.V. Sreenivasan and D.J. Resnick,	Molecular Imprints, USA
14B1-5-39	Si Mold Fabrication with Extremely High Aspect Pattern by the Combination of Deep Rie and Koh Treatment	H. Kawata, K. Kubo, M. Matsue, M. Yasuda and Y. Hirai	Osaka Pref. Univ., Japan
14B1-5-40	Large Area Mold Fabrication by Electron-Beam Stepper	M. Okada 1, T. Kishiro 2, K. Yanagihara 2, M. Ataka 2, N. Anazawa 2 and S. Matsui 1	1 Univ. of Hyogo and 2 Holon, Japan
14B1-5-41	Antisticking Layer Formed by CHF3 Plasma Irradiation for Nanoimprint Molds	M. Okada 1, K. Nakamatsu 1,2, Y. Kang 1, K. Kanda 1, Y. Haruyama 1 and S. Matsui 1	1 Univ. of Hyogo and 2 JSPS, Japan
14B1-5-42	Room Temperature Nanoimprinting on a Release Agent Coated Hydrogen Silsesquioxane	M. Okada 1, M. Iwasa 2, K. Nakamatsu 1, 3, Y. Kang 1, K. Kanda 1, Y. Haruyama 1 and S. Matsui 1	1 Univ. of Hyogo, 2 SII NanoTechnol. and 3 JSPS, Japan
14B1-5-43	Fabrication of Wavy Grating Microstructures	S.-J. Lin 1, Y.-Y. Su 1, M.-K. Wei 1, W.-L. Lai 2, H.-Y. Lin 2, J.-H. Tsai 2 and T.-C. Wu 2	1 Natl. Dong Hwa Univ. and 2 Industr. Technol. Res. Inst., Taiwan
14B1-5-44	On the Degradation of Anti-Sticking Layers during Nanoimprint Lithography	R. Galand 1, D. Boutry 1, A. Beaurain 1, A. Francone 1, B. Pelissier 1, M. Zelsmann 1, B. Pepin-Donat 2 and J. Boussey 1	1 LTM-CNRS and 2 LEMOH, France
14B1-5-45	Preparation Methods and Characteristics of Fluorinated Polymers for Mold Replication	K. Tsunozaki and Y. Kawaguchi	Asahi Glass, Japan
14B1-5-46	Stitching Free High Resolution Stamps for Molding Techniques with EUV Interference Lithography	M. Bednarzik 1, M. Saidani 1, B. Keusch 2, H. Solak 3, H. Schiff 1, C. Spreu 1 and J. Gobrecht 1	1 Paul Scherrer Inst., 2 INKA Inst. of Polymer Nanotechnology and 3 EULITHA AG, Switzerland
14B1-5-47	Fabrication of Nanopatterned Conducting Polymer on Flexible Substrate by Reversal Nanoimprint	J. Lee, D.-G. Choi, A. O. Altun, K.-D. Kim, J.-H. Choi, S.-W. Lee, K.-J. Lee, E.-S. Lee and J.-H. Jeong	Korea Inst. of Machinery & Materials, Korea
Room B-2: Nanoimprint General			
14B2-5-48	Quantized-Patterning Using Nanoimprinted-Blanks (QUN)	W.-D. Li, X. Liang and S.Y. Chou	Princeton Univ., USA
14B2-5-49	The Analysis of Residual Layer Thickness in Roll Pressing Imprint Lithography	Y.T. Cho, J.G. Kim, J.W. Cho, J.W. Seo, S. Kwon, Y.S. Sim, S.W. Lee and H. Kim	Samsung Electro., Korea
14B2-5-50	Direct Nanoimprinting of Gold Film for Fabricating Metallic Gratings	J. - N. Aoh	Natl. Chung Cheng Univ., Taiwan
14B2-5-51	Fabrication of High Aspect Si Structures by Deep Reactive Ion Etching using Nanoimprinted HSQ Masks	K. Nakamatsu 1,2 and S. Matsui 1	1 Univ. of Hyogo and 2 JSPS, Japan

14B2-5-52	Fabrication of Silver Nanoparticle Arrays based on the Combination of NIL and Electrochemical Deposition	B. Yang 1, N. Lu 1, D. Qi 1, H. Xu 1 and L. Chi 1,2	1 Jilin Univ., China, and 2 Westfalische Wilhelms-Univ. Munster, Germany
14B2-5-53	Controlled Growth of Metal Oxide Nanowires via Nanoimprinting-based Patterning of Nanoparticle Seeds	I. Park, S.H. Ko, S. Choi. Costas, P. Grigoropoulos and A.P. Pisano	UCLA, Berkeley, USA
14B2-5-54	Nanofabrication of ITO Film by Room-Temperature Nanoimprint	Y. Kang 1, M. Okada 1, K. Nakamatsu 1,2, K. Kanda 1, Y. Haruyama 1 and S. Matsui 1	1 Univ. of Hyogo and 2 JSPS, Japan
14B2-5-55	Nanolithography Using Photocatalytic Decomposition of Organic Films	K. Kobayashi, Y. Tomita, Y. Maeda and Y. Khono	Shizuoka Univ., Japan

Room B-2: UV Imprint / Process

14B2-5-56	Theoretical and Experimental Evaluation of Flowing Behaviour of Spin Coated UV-NIL Materials	A. Francone 1, C. Iojoiu 2, P. Voisin 1, C. Gourgon 1, D. Boutry 1, M. Zelsmann 1 and J. Boussey 1	1 MINATEC and 2 Physicochimie des Materiaux et des Interfaces, France
14B2-5-57	Multi-Layer Alignment by UV-Imprint Process using Water Soluble Resist	D.-I. Lee, S.-U. Jung and S.-U. Kwak	Kornic Systems, Korea
14B2-5-58	Soft UV-NIL Enables Industrial Applications	T. Glinsner 1, G. Kreindl 1, A. Malzer 1, R. Fodisch 1, P. Lindner 1, M. Wimplinger 1 and R. Miller 2	1 EVGroup and 2 EVGroup Inc., USA
14B2-5-59	Realization of Nanoholes by Soft UV Nanoimprint Lithography for the Study of Membrane Proteins	F. Hamouda, E. Laille, G. Barbillon, G. Agnus, P. Gogol, D. Bouville, T. Maroutian, and B. Bartenlian	Univ. Paris-Sud, France
14B2-5-60	UV Step and Stamp Imprint Lithography using Transparent Polymer Stamp	T. Haatainen 1, P. Majander 2, T. Makela 3, J. Ahopelto 1, Y. Kawaguchi 2 and G. Lecarpentier 3	1 VTT Micro & Nanoelectron., Finland, 2 Asahi Glass, Japan and 3 Smart Equipment Technol. SAS, France
14B2-5-61	High-Throughput Nano-Metal Patterning Process using UV Nanoimprint Lithography and Electrodeposition	H. Shinohara, Jun M. and S. Shoji	Waseda Univ., Japan
14B2-5-62	A 3D Micropatterning for Cylindrical Microcircuits based on UV Imprinting Combined with PDMS Molding Process	D.K. Lee, S.W. Youn, I. Terada, T. Itoh, M. Takahashi and R. Maeda	AIST, Japan

Room B-2: UV Imprint / Material

14B2-5-63	Photocurable Silsesquioxane Resists for Nanoimprint Lithography	C. Pinaa 1, L. J. Guo 1 and P.-F. Fu 2	1 Univ. of Michigan and 2 Dow Corning, USA
14B2-5-64	UV-NIL using Working Stamps made from Ormostamp	M. Muhlberger 1, I. Bergmair 1, A. Klukowska 2, A. Kolander 2, H. Leichtfried 1, E. Platzgummer 3, H. Loeschner 3, Ch. Ebm 3, G. Grutzner 2 and R. Schoftner 1	1 Profactor, Austria, 2 Micro Resist Technol. and 3 IMS Nanofabrication, Germany
14B2-5-65	Plasma Etching Behaviour of Photocured Nanoimprint Resists	D. Boutry, J. De Girolamo, X. Mellhaoui, M. Zelsmann and J. Boussey	LTM-CNRS, France
14B2-5-66	Functionality and Etch Selectivity of Direct UV Imprinted Patterns onto Nanosilver Colloid-Dispersed Resists	J.-H. Choi, S.-W. Lee, J.-H. Jeong, D.-G. Choi, K.-D. Kim and E.-S. Lee	Korea Inst. of Machinery & Materials, Korea

Room B-2: Application / Optics

14B2-5-67	Materials and Patterns Shape Selection Processes by NIL on Transparent Substrates for Optical Application	N. Chaix 1, C. Gourgon 1, C. Perret 1, S. Landis 2, V. Lambertini 3, N.L. Pira 3	1 LTM-CNRS, 2 Minatec, France and 3 FIAT, Italy
14B2-5-68	Optical Nanoimprint using Plastic Template and Visible Light-Curable Photopolymer	N. Fujii 1, S. Moriyama 2, H. Kawata 1, M. Komai 2 and Y. Hirai 1	1 Osaka Pref. Univ. and 2 Kyowa Hakko Chemical, Japan
14B2-5-69	Fabrication of Artificial Butterfly Wings Nanostructures: Iridescence and Restricted Viewing Angle Effects	T.S. Kustandi, H.Y. Low, J.H. Teng, I. Rodriguez and R. Yin	A*STAR, Singapore
	Resolution of Subwavelength Diffraction for Critical	T. Kehoe 1,2, V. Reboud 1, B.	1 Campus Univ. Autonoma de

14B2-5-70	Dimension Metrology	McCarthy 2 and C.M. Sotomayor Torres 1,3	Barcelona, Spain, 2 Univ. College Cork, Ireland and ICREA, Spain
14B2-5-71	Alignment of Liquid Crystals at Functional Patterns Prepared by Nanoimprint Lithography	T.N. Oo 1, M. Yoneya 2, Y. Mitsuhashi 1 and H. Yokoyama 2	1 Japan Sci. & Technol. Agency and 2 AIST, Japan
14B2-5-72	Effect of Dual Side Patterning and Imprint Materials in the Fabrication of Antireflective Structure using Nanoimprint	D.-G. Choi, K.-J. Lee, K.-D. Kim, J. Lee, J.-H. Choi, E.-S. Lee and J.-H. Jeong	Korea Inst. of Machinery & Materials, Korea
14B2-5-73	Imprinted Optical Elements with High Efficiency for Liquid Crystal Displays	Y.-W. Lim, W. Lee and S.-D. Lee	Seoul Natl. Univ., Korea
14B2-5-74	Analysis Simulation for Black Matrix Correction of Deformities Process Optimization	J.-S. An, S.-U. Jung and S.-U. Kwak	Kornic Systems, Korea
14B2-5-75	Fabrication of Anti-Reflection Film by Imprinting Processes with AAO Template	H.M. Chen 1, M.H. Hon 1, and I.C. Leu 2	1 Natl. Cheng-Kung Univ. and 2 Natl. United Univ., Taiwan
14B2-5-76	Antireflection Structures by Nanoimprinting using Anodic Porous Alumina Molds	T. Yanagishita 1,2, T. Endo 1, K. Nishio 1,2 and H. Masuda 1,2	1 Tokyo Metropol. Univ. and 2 Kanagawa Academy of Sci. & Technol., Japan
14B2-5-77	Fabrication and Characterization of Metallic Nanocavities by Nanoimprint Lithography	J. Shi 1, J. Chen 1, D. Decanini 1, Y. Chen 2 and A.-M. Haghiri-Gosnet 1	1 Lab. de Photonique et de Nanostructures and 2 Ecole Normale Supérieure de Paris, France
14B2-5-78	Fabrication of Artificial Compound Eyes with Combined Microscale and Nanoscale Topography by Soft Embossing Technique	J.-H. Chang, C.-S. Jao, Y.-P. Chen, S.-J. Chiu and L.A. Wang	Natl. Taiwan Univ., Taiwan

Banquet (Sakura, 1F)

Banquet (18:00-20:00)

Event: Dance of Kyoto by MAIKO

October 15, 2008

Registration (beside Room A) (8:30-16:30)

Chairpersons: M. Komuro (NEDO), B.-K. Lee (Samsung Advanced Inst. of Technol.)

15A-6: Application II

15A-6-1	9:00	9:30	Nanoimprint Applications on CMOS Devices (Plenary)	T. Nakasugi	Toshiba, Japan
15A-6-2	9:30	10:00	Large Area UV Nanoimprint Lithography for TFT-LCD Devices (Plenary)	J. Bae, B. Kim, J. Chang and S. Lim	Samsung Electronics, Korea
15A-6-3	10:00	10:20	A Nanogap Detector Inside Nanofluidic Channel for Fast Real-Time Label-Free DNA Analysis Using Multiple Nanoimprint Lithography (Invited)	X. Liang and S.Y. Chou	Princeton Univ., USA

Chairpersons: A. Yokoo (NTT), L.A. Wang (National Taiwan Univ.)

15A-7: Application III

15A-7-1	10:20	10:40	Self-Aligned Multilevel Molds for Top-Gate Fet Fabrication using Imprint Lithography	E. Lausecker 1,2, Y. Huang 1, S. Wagner 1 and J. C. Sturm 1	1 Princeton Univ., USA and 2 Univ. of Linz, Austria
15A-7-2	10:40	11:00	GHz Band Surface Acoustic Wave Filter Fabrication by UV-Nanoimprint	N.-H. Chen 1, C.-L. Liao 1, H.J.H. Chen 2 and F.-S. Huang 1	1 Natl. Tsing Hua Univ. and 2 Natl. Chi Nan Univ., Taiwan
15A-7-3	11:00	11:20	Patterned Media using Step and Flash Imprint Lithography	D.J. Resnick 1, M. Miller 1, G. Schmid 1, C. Brooks 1, N. Khusnatdinov 1, D. LaBrake 1, S.V. Sreenivasan 1, G. Gauzner 2, K. Lee 2, D. Kuo 2 and D. Weller 2	1 Molecular Imprints and 2 Seagate Technol., USA
	11:20	11:40	Imprinting Process for a Large Area	K.-J. Byeon 1, E.-J. Hong 1, S.-	1 Korea Univ. and 2 Chonbuk

15A-7-4			Pattern Transferring on Light-Emitting Diodes Structure to Improve Light Extraction	H. Hong 1, S.-Y. Hwang 1, C.-H. Hong 2 and H. Lee 1	Natl. Univ., Korea
15A-7-5	11:40	12:00	Metallic Nanoparticules Enhanced the Spontaneous Emission of Semiconductor Nanocrystals Embedded in Nanoimprinted Photonic Crystals	V. Reboud 1,6, N. Kehagias 1,6, M. Striccoli 3, T. Placido 3, A. Panniello 4, M.L. Curri 3, M. Zelsmann 2, J.A. Alducin 5, D. Mecerreyes 5, S. Newcomb 7, H. Doyle 6, G. Redmond 6 and C.M. Sotomayor Torres 1,7	1 Catalan Inst. of Nanotechnol., Spain, 2 LTM-CNRS, France, 3 Sezione Bari, Italy, 5 Nanogune-Consolider & CIDETEC-Centre for Electrochemical Technol., Spain, 6 Univ. College Cork, Ireland, 7 Newport, Ireland and 8 ICREA, Spain
15A-7-6	12:00	12:20	Roll-to-Roll Thermal Nanoimprinted Microfluidic Sdparation Devices	A.V. Larsen 1, T. Makela 2, P. Majander 2, J. Ahopelto 2 and A. Kristensen 1	1 Tech. Univ. of Denmark, Denmark and 2 VTT Micro & Nanoelectron., Finland

Lunch (12:20-13:20)

Chairpersons: M. Houga (DNP), D.J. Resnick (Molecular Imprints)

15A-8: Mold Technology

15A-8-1	13:20	13:40	Capacity-Equalized Mold for Nanoimprint Lithography	H. Hiroshima	AIST, Japan
15A-8-2	13:40	14:00	Si-Mold Fabrication Process by using High-Resolution Chemically Amplified Resist	M. Ishikawa, T. Chiba, M. Fukuda, M. Kurihara, H. Sano and M. Hoga	Dai Nippon Printing, Japan
15A-8-3	14:00	14:20	Characterization of UV-Cured Nanoimprint Resist ? Metallic Release Layer Systems	F.A. Houle, D.L. Casher, D.C. Miller, S. Raoux and E. Simonyia	IBM, USA
15A-8-4	14:20	14:40	Nanoimprint-Soft Lithography combined Mold with Ultra-Thin Rigid Patterning Layer on Elastic Support	Z. Li 1, H. Ge 1, W. Wu 2, Q. Xia 2, C. Yuan 1 and Y. Chen 1	1 Nanjing Univ., China and 2 Hewlett-Packard Lab., USA
15A-8-5	14:40	15:00	Nanoscale Releas Effect Measurement of Antisticking Layer for Nanoimprint Resin by Scanning Probe Microscope	M. Okada 1, M. Iwasa 2, K. Nakamatsu 1,3, Y. Kang 1, K. Kanda 1, Y. Haruyama 1 and S. Matsui 1	1 Univ. of Hyogo, 2 SII Nanotechnol. and 3 JSPS, Japan
15A-8-6	Withdrawn				

Coffee Break (15:00-15:20)

Chairpersons: S. Matsui (Univ. of Hyogo), J. Ahopelto (VTT Micro & Nanoelectron)

15A-9: Process & Tools

15A-9-1	15:20	15:40	Imprinting Fine Structures on Non-planar Surfaces and their Applications (Invited)	L.A. Wang	National Taiwan Univ., Taiwan
15A-9-2	15:40	16:00	Applications of Non-Conventional Nanoimprint Lithography (Invited)	K-Y Yang, S-H Hong, K-J Byeon, K-S Han and H. Lee	Korea Univ., Korea
15A-9-3	16:00	16:20	Reversal μ Cp using Hard Stamps for the Fabrication of Negative Index Materials	I. Bergmair 1,2, M. Muhlberger 1, W. Schwinger 1, K. Hingerl 2, R. Schoftner 1	1 Profactor and 2 CD Lab. of Surface Optics, Austria
15A-9-4	16:20	16:40	Can Sub-5nm Full-Field Overlay be Achieved using Imprint Lithography?	P.D. Schumaker, A. Cherala, B. Mokaberi-Nezhad, M. Meissl, B.J. Choi and S.V. Sreenivasan	Molecular Imprints, USA
15A-9-5	16:40	17:00	Large-Area Continuous Roll-to-Roll and Roll-to-Plate Nanoimprinting on Flexible and Rigid Substrates	S.H. Ahn and L.J. Guo	Univ. of Michigan, USA

Closing

	17:00	17:05	Closing	S. Matsui	NNT'08 Co-Chair, Univ. of Hyogo, Japan
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