TECHNICAL PROGRAM

	MONDAY, DECEMBER 8TH, 2014	PART NO.
08:00-08:20	**OPENING – WELCOME - INTRODUCTION** **L.P.H. Jeurgens[1], J. Janczak-Rusch[1], Y.N. Zhou[2], A. Hirose[3]** [1]*Empa, Swiss Federal Laboratories for Materials Science and Technology, Switzerland* [2]*University of Waterloo, Centre for Advanced Materials Joining, Canada* [3]*Osaka University, Division of Materials and Manufacturing Science, Japan*	*CHAIRS*
Session	**ORAL SESSION I (PLENARY)**	
Room	**SEEBLICK**	
Chair	**Y.N. Zhou, L.P.H. Jeurgens**	
08:20	**ASSEMBLY AND PACKAGING TECHNOLOGIES FOR POWER DEVICES AND MODULES** **Y. Kashiba** *Manufacturing Engineering Center, Mitsubishi Electric Corporation, Japan*	*KEYNOTE* *K1*
09:00	**HIGH TEMPERATURE VIABLE INTERCONNECTION REALIZED BY SINTERING Sn-M IMC NANOALLOYS AT LOW TEMPERATURE** **C. Wang, Y. Zhong, Z. Zheng** *State Key Lab. of Advanced Welding & Joining, Harbin Institute of Technology, China*	*KEYNOTE* *K2*
09:40	**SYNTHESIS AND CHARACTERIZATION OF NANOTHERMITE FOR MICRO-JOINING APPLICATIONS** **J.Z. Wen** *Dept. of Mechanical & Mechatronics Engineering, University of Waterloo, Canada*	*INVITED* *I4*
10:00-10:30	COFFEE BREAK	
Session	**ORAL SESSION II (PLENARY)**	
Room	**SEEBLICK**	
Chair	**A. Hirose, J. Janczak-Rusch**	
10:30	**SIZE EFFECTS ON THE THERMODYNAMIC PROPERTIES OF NANOALLOYS** **C. Ricolleau[1], G. Prévot[2], J. Nelayah[1], G. Wang[1], D. Alloyeau[1]** [1]*Laboratoire Matériaux et Phénomènes Quantiques, Université Paris 7 – CNRS, France* [2]*Institut des Nanosciences de Paris, Université Paris 6 – CNRS, France*	*INVITED* *I2*
10:50	**MICROSTRUCTURAL EVOLUTION OF NANO-STRUCTURED Ag-Cu/AlN BRAZING FILLERS UPON HEATING** **M. Lewandowska[1], M. Andrzejczuk[1], G.Pigozzi[2], L.P.H. Jeurgens[2], J. Janczak-Rusch[2]** [1]*Warsaw University of Technology, Faculty of Materials Science and Engineering, Poland* [2]*Empa, Swiss Federal Laboratories for Materials Science and Technology, Switzerland.*	*INVITED* *I3*
11:10	**SILVER SINTER JOINING AND NEW THIN FILM BONDING FOR WBG DIE-ATTACH** **K. Suganuma, S. Nagao, T. Sugahara, C. Oh, H. Zhang, S. Koga, S. Park** *Institute of Scientific and Industrial Research, Osaka University, Japan*	*INVITED* *I5*
11:30	**COPPER NANOCOMPOSITE PASTE FOR HIGH RELIABLE INTERCONNECTION AND ITS JOINING CHARACTERISTICS** **K.-S. Kim, S.-B. Jung** *School of Advanced Materials Science and Eng., Sungkyunkwan University, Republic of Korea*	*R0*
11:50	**NANO BRAZING TECHNOLOGY IN INDUSTRIAL ENVIRONMENT** **M. Türpe** *MAHLE Behr GmbH & Co. KG, Stuttgart, Germany*	*R1*
12:10-13:30	LUNCH	

	MONDAY, DECEMBER 8TH, 2014	PART NO.
Session	**ORAL SESSION III (PLENARY)**	
Room	**SEEBLICK**	
Chair	**G. Zou, W. Tillmann**	
13:30	**BRIDGING THE GAP BETWEEN ATOMISTICS AND THERMODYNAMICS OF INTERFACES TO CONTROL WETTING AND PHASE FORMATION FOR METAL-CERAMIC JOINS** **W.D. Kaplan** *Israel Institut of Technology, Israel*	*KEYNOTE* *K3*
14:10	**STATE-OF-THE-ART LOCAL ELECTROCHEMICAL CHARACTERISATION OF MICRO- AND NANO-JOINTS** **T. Suter, P. Schmutz, J. Janczak-Rusch** *Empa, Swiss Federal Laboratories for Materials Science and Technology, Switzerland*	*R2*
14:30	**JOINING TECHNOLOGY THROUGH SINTERING OF SILVER NANOPARTICLES DERIVED FROM SILVER OXIDE PASTE** **T. Ogura, A. Hirose** *Division of Materials and Manufacturing Science, Graduate School of Engineering, Osaka University, Japan*	*R3*
14:50	**JOINING OF COPPER BY AG NANOPASTE: MICROSTRUCTURE AND STRENGTH BEHAVIOUR** **B. Wielage, S. Weis, H. Podlesak, S. Hausner** *Institute of Materials Science and Engineering, Germany*	*R4*
15:10	**SYNTHESIS AND LIGHT INDUCED NANOJOINING OF SILVER NANOWIRES** **Y. Tian, S. Ding, C. Wang** *State Key Laboratory of Advanced Welding and Joining, Harbin institute of technology, China*	*R5*
15:30-16:00	COFFEE BREAK	
Session	**ORAL SESSION IV (PLENARY)**	
Room	**SEEBLICK**	
Chair	**A. Hu, B. Wielage**	
16:00	**RELIABILITY OF LEAD-FREE SOLDER JOINTS IN MICROELECTRONICS** **E. Hodúlová, B. Šimeková, I. Kovaříková** *Slovak University of Technology in Bratislava, Faculty of Materials Science and Technology in Trnava Institute of Production Technologies, Slovak Republic*	*INVITED* *I6*
16:20	**WIREBONDER-MADE MICRO ELECTRO MECHANICAL SYSTEMS** **J.G. Korvink[1], U. Wallrabe[2]** [1]*University of Freiburg, Dept. of Microsystems Eng., Laboratory for Simulation, Germany* [2]*University of Freiburg, Dept. of Microsystems Eng., Laboratory for Microactuator, Germany*	*INVITED* *I7*
16:40	**EFFECT OF RAPID SOLIDIFICATION ON MICROSTRUCTURE AND PROPERTIES OF Sn-Ag-Cu LEAD-FREE SOLDER** **S. Lu, F.J. Wang, Z.X. Zheng** *Provincial Key Laboratory of Advanced Welding Technology, Jiangsu University of Science and* *Technology, China*	*R6*
17:00	**LEAD FREE BGAS SOLDERED WITH SnPb SOLDER** **G. Grossmann[1], G. Nicoletti** *EMPA, Swiss Federal Laboratories for Materials Science and Technology, Switzerland*	*R7*
17:20	**EFFECT OF ISOTHERMAL AGING ON IMPACT STRENGTH OF Sn-Ag-Cu SOLDER BUMPS** **J.X. Wang[1, 2], H. Nishikawa[2]** [1]*Jiangsu Provincial Key Laboratory of Advanced Welding Technology, Jiangsu University of Science and Technology, China* [2]*Joining and Welding Research Institute, Osaka University, Japan*	*R8*
17:40	**EFFECT OF THERMAL TREATMENT ON Cu EXTRUSION OF TSV AND SOLDER BUMPING FOR THREE-DIMENSIONAL PACKAGING** **S.H. Kee, M.H. Roh, S.J. Lee, J.P. Jung, W.J. Kim** *Dept. of Materials Science and Engineering, University of Seoul, Korea*	*R9*
18:00-19:00	BREAK	
19:00	**DINNER & SOCIAL EVENT (TORCH-LIT WALK)**	

	TUESDAY, DECEMBER 9th, 2014	PART NO.
Session	**ORAL SESSION V (PLENARY)**	
Room	**SEEBLICK**	
Chair	**M. Mayer, P. Gröning**	
08:20	**FEMTOSECOND LASER NANOSTRUCTURING, PRINTING OF NANOPARTICLES, AND MICRO-JOINING** **B. Chichkov** *Laser Zentrum Hannover e.V., Germany*	*KEYNOTE* *K4*
09:00	**FORMATION AND CHARACTERIZATION OF SUBCLUSTER SEGREGATED NANOALLOY WITH FEMTOSECOND LASER IRRADIATION** **Z. Jiao[1,2], W. Duley[3], N. Zhou[2,4], P. He[1]** *[1]State Key Laboratory of Advanced Welding Production Technology, Harbin Institute of Technology, Harbin 150001, China* *[2]Centre for Advanced Materials Joining, University of Waterloo, Canada* *[3]Dept. of Physics & Astronomy, University of Waterloo, Canada* *[4]Dept. of Mechanical and Mechatronics Engineering, University of Waterloo, Canada*	*INVITED* *I8*
09:20	**ULTRA-LOW POWER INTEGRATED PH NANOSENSORS** **A.M. Ionescu, S. Rigante, E. Buitrago** *Nanolab, Ecole Polytechnique Fédérale de Lausanne, Switzerland*	*INVITED* *I9*
09:40	**GROWTH AND ASSEMBLY OF GRAPHENE THIN FILMS ON INSULATING SUBSTRATES** **T. Ogino** *Division of Electrical and Computer Engineering, Yokohama National University, Japan*	*INVITED* *I10*
10:00-10:30	COFFEE BREAK	
Session	**ORAL SESSION VI (PLENARY)**	
Room	**SEEBLICK**	
Chair	**F. Baras, H. Nishikawa**	
10:30	**JOINING REFRACTORY AND DISSIMILAR MATERIALS USING REACTIVE NANOFOILS** **A.S. Rogachev[1,2], A.S. Mukasyan[2,3], S.G. Vadchenko[1], A.A. Nepapushev[2]** *[1]Inst. of Structural Macrokinetics & Material Science Russian Academy of Science (ISMAN), Russia* *[2]Center of Functional Nano-Ceramics, National University of Science and Techn., "MISIS", Russia* *[3]Dept. of Chemical and Biomolecular Engineering, University of Notre Dame, USA*	*INVITED* *I11*
10:50	**ADVANCED NANOSTRUCTURE FORMATION VIA INTERFACE AND GRAIN BOUNDARY TAILORING** **S. Baylan[1], G. Richter[1], M. Beregovsky[2], D. Amram[2], E. Rabkin[2]** *[1]Max Planck Institute for Intelligent Systems, Germany* *[2]Dept. of Materials Science and Engineering, Technion, Israel*	*INVITED* *I12*
11:10	**NANOJOINING: FROM NANOSINTERING TO 3D NANOMANUFACTURING** **A. Hu[1], R. Li[1,2], Q. Ma[1], D. Bridges[1]** *[1]Dept. of Mechanical, Aerospace and Biomedical Eng., University of Tennessee Knoxville, USA* *[2]Dept. of Electrical Engineering, Southeast University, China*	*INVITED* *I13*
11:30	**PATTERNING OF INDIUM TIN OXIDE MICROWIRES USING LASER-INDUCED THERMAL PRINTING METHOD** **T. Sano[1], S. Iwasaki[1], S. Katsura[2], K. Yoshida[3], A. Nakayama[4], A. Hirose[1]** *[1]Div. of Materials and Manufacturing Science, Graduate School of Eng., Osaka University, Japan* *[2]Nippon Denki Kagaku Co., Japan* *[3]General Co., Ltd., Japan* *[4]Ion Technology Center Co., Ltd., Japan*	*INVITED* *I14*
11:50	**EX- AND IN-SITU X-RAY BASED ANALYTICAL STUDIES ON SOLDER MATERIALS FOR MICROSYSTEMS PACKAGING APPLICATIONS** **A. Neels[1], T. Bandi[2], R. Kaufmann[1], J. Janczak-Rusch[1], L.P.H. Jeurgens[1], A. Dommann[1]** *[1]Empa, Swiss Federal Laboratories for Materials Science and Technology, Switzerland* *[2]SSC, Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland*	*R10*
12:10-13:30	LUNCH	

	TUESDAY, DECEMBER 9th, 2014	PART NO.
Session	**ORAL SESSION VII (PARALLEL)**	
Room	**WALDHORN (ROOM 1)**	
Chair	**L. Quintino, J-P. Jung**	
13:30	**SOLID-LIQUID DIFFUSION BONDING OF COPPER USING Sn/Ag MULTILAYERED FILMS** **S. Fukumoto[1], K. Miyake[2], M. Matsushima[1], K. Fujimoto[1]** *[1]Graduate School of Engineering, Osaka University, JAPAN* *[2]Graduate Student of Osaka University, JAPAN*	*R12*
13:50	**NANO-SIZE Ag/AlN MULTILAYERS FOR LOW TEMPERATURE JOINING APPLICATIONS** **M. Chiodi, F. Moszner, C. Cancellieri, G. Pigozzi, J. Janczak-Rusch, L.P.H. Jeurgens** *Empa, Swiss Federal Laboratories for Materials Science and Technology, Switzerland*	*R14*
14:10	**AQUEOUS Cu NANOPARTICLE INK STABILIZED BY PVP-SDS** **A.Y. Li[1, 2], B.H. Wang[2], C. Yao Huo[2]** *[1]State Key Laboratory of Advanced Welding & Joining, School of Materials Science & Engineering Harbin Institute of Technology, China* *[2]School of Materials Science and Engineering, Harbin Institute of Technology at Weihai, China*	*R16*
14:30	**MELTING, MIXING AND NUCLEATION AT INTERFACES IN Ni-Al NANOFOILS : A MOLECULAR DYNAMICS APPROACH** **V. Turlo, O. Politano, F. Baras** *Laboratoire ICB, UMR 6303 CNRS-Université de Bourgogne, FRANCE*	*R18*
14:50	**START TEMPERATURE MANIPULATION AND EFFICIENCY IMPROVING OF SELF-PROPAGATION CHEMICAL REACTIONS IN MULTILAYERED THERMITE MATERIALS BASED ON ALUMINUM-COPPER NITRIDE COMPOSITE** **D.G. Gromov[1], E.A. Lebedev[1], S.P. Timoshenkov[1], Y.I. Shilyaeva[1], V.A. Galperin[2], D.I. Smirnov[3], E.P. Kirilenko[4]** *[1]National Research University of Electronic Technology, Russia* *[2]Science Manufacturing complex "Technological Center", Russia* *[3]Lebedev Physical Institute of Russian Academy of Science, Russia* *[4]Science-Technological center "Nano- and Microsystems technics", Russia*	*R20*
15:10	**INVESTIGATION OF COPPER-BASED NANOSTRUCTURED MULTILAYER SYSTEMS FOR BRAZING APPLICATIONS** **W. Tillmann, B. Lehmert, L. Wojarski, M. Kuck** *TU Dortmund, Institute of Materials Engineering, Germany*	*R22*
15:30-16:00	Coffee Break	
Session	**ORAL SESSION VIII (PARALLEL)**	
Room	**WALDHORN (ROOM 1)**	
Chairperson	**P. He, M. Yavuz**	
16:00	**FEMTOSECOND LASER INDUCED NANOJOINING** **L. Liu[1,2], L. Lin[1], D. Shen[1], H. Bai[1], G. Zou[1], Y.N. Zhou[3]** *[1]Dept. of Mechanical Engineering, Tsinghua University, China* *[2]The State Key Laboratory of Tribology, Tsinghua University, China* *[3]Dept. of Mechanical & Mechatronics Engineering, University of Waterloo, Canada*	*R24*
16:20	**TRANSIENT THERMAL IMPEDANCE OF IGBT MODULES JOINED BY LEAD-FREE SOLDER AND SINTERED NANOSILVER** **M.Y. Wang[1], Y.H. Mei[1], X. Li[1], G.Q. Lu[1,2]** *[1]Tianjin Key Laboratory of Advanced Joining Technology, School of Material Science and Engineering, Tianjin University, China* *[2]Dept. of Material Science and Engineering, Virginia Tech, USA*	*R26*
16:40	**LASER ASSISTED LOW TEMPERATURE HERMETIC SEALING OF OPTOELECTRONICS DEVICES** **R. Jose James[1], E. Rutz[1], T. Stadelmann[1], S. Berchtold[1], M. Lützelschwab[1], Ch. Bosshard[1], M. Epitaux[2], A. Hold[2], C. Vélez[2]** *[1]CSEM SA, Switzerland* *[2]Exalos AG, Switzerland*	*R28*
17:00	**EFFECTS OF HEAT TREATMENT ON RESISTANCE MICROWELDING JOINTS OF CROSSED NITINOL WIRES** **Y. Huang[1,2], A. Pequegnat[2], N. Zhou[2]** *[1]National Defense Key Disciplines Laboratory of Light Alloy Processing Science and Techn. Nanchang Hangkong University, China* *[2]Centre for Advanced Materials Joining, University of Waterloo, Canada*	*R30*
17:20	Transfer to Poster Session SEEBLICKSAAL	
17:30	**POSTER SESSION SEEBLICK**	

	TUESDAY, DECEMBER 9th, 2014	PART NO.
Session	**ORAL SESSION IX (PARALLEL)**	
Room	**ZEDER (ROOM 2)**	
Chairperson	**T. Ogura, G. Grossmann**	
13:30	**IMPROVEMENT OF IMPACT RELIABILITY OF SOLDER BUMPS USING LASER PROCESS** **H. Nishikawa[1] , N. Iwata[2]** *[1]Joining and Welding Research Institute, Osaka University, Japan* *[2]Graduate School of Engineering, Osaka University, Japan*	*R13*
13:50	**DISPLACEMENT ANALYSIS OF BONDING WIRES UNDER DC CURRENT** **T. Dagdelen[1], M. Khater[2], S. Park[2], R. Saritas[1], E. Abdel-Rahman[2], M. Yavuz[1]** *[1]Mechanical and Mechatronics Engineering Department, University of Waterloo, Canada* *[2]Department of System Design Engineering, University of Waterloo, Canada*	*R15*
14:10	**INTERMETALLIC COMPOUND JOINTS PRODUCED BY ULTRASONIC SOLDERING PROCESS IN Cu/Sn/Cu SYSTEM** **M. Li[1,2], Z. Li[1], C. Wang[2]** *[1]Shenzhen Key Laboratory of Advanced Materials, Harbin Institute of Technology Shenzhen Graduate School, HIT Campus ,The University Town of Shenzhen, China* *[2]State Key Laboratory of Advanced Welding and Joining, Harbin Inst. of Techn., China*	*R17*
14:30	**MECHANICAL RESPONSE ON Cu-Sn INTERMETALLICS** **F. Wang, X. Li, and K. Qi** *Provincial Key Lab. of Adv. Welding Techn., Jiangsu University of Science & Techn., China*	*R19*
14:50	**SHEAR STRENGTH DEGRADATION OF Pb-FREE SOLDER JOINT WITH MOUNTED LOCATION IN AUTOMOBILE** **W.S. Hong, A Young Kim** *Components & Materials Physics Research Center, Korea Electronics Technology Institute*	*R21*
15:10	**3D STEREOLITHOGRAPHIC PRINTING OF TERAHERTZ WAVE PHOTONIC CRYSTALS THROUGH MICRO JOINING OF OXIDE AND METALLIC GLASSES** **S. Kirihara** *Joining and Welding Research Institute, Osaka University, Japan*	*R23*
15:30-16:00	Coffee Break	
Session	**ORAL SESSION X (PARALLEL)**	
Room	**ZEEDER (ROOM 2)**	
Chairperson	**D.G. Gromov, T. Sano**	
16:00	**INSPECTION OF MICRO DEFECTS USING BACTERIAL CELLS** **T.G. Santos[1], R.M. Miranda[1], L. Quintino[2], C.C.C.R. de Carvalho[3]** *[1]UNIDEMI, Departamento de Engen!Ulria Medinica e Industrial, Faculdade de Ciencias e Tecnologia, Universidade Nova de Lisboa, Portugal* *[2]IDMEC, Instituto Superior Tecnico, Universidade de Lisboa, Portugal* *[3]Institute of Biotechnology and Bioengineering, Centre for Biological and Chemical Eng., Dept. of Bioengineering, Instituto Superior Tecnico, Universidade de Lisboa, Portugal*	*R25*
16:20	**STABILITY AND MELTING OF FCC TRUNCATED OCTAHEDRAL AG NANOPARTICLES BY MOLECULAR DYNAMICS SIMULATION** **H. Alarifi[1], M. Atiş[2], C. Özdoğan[3], A. Hu[4], M. Yavuz[5], Y. Zhou[5]** *[1]King Abdulaziz City for Science and Technology, Saudi Arabia* *[2]Kayseri Vocational School, Dept. of Electricity and Energy, Erciyes University, Turkey* *[3]Dept. Materials Science and Engineering, Cankaya University, Turkey* *[4]Dept. Mechanical, Aerospace & Biomedical Eng., University of Tennessee Knoxville, USA* *[5]Dept. Mech. & Mechatronics Eng., Centre for Adv. Mater. Joining, Univ. of Waterloo, Canada*	*R27*
16:40	**NUMERICAL ANALYSIS OF MICROBUBBLE BEHAVIOR AND MICROPOROSITY FORMATION IN LASER BEAM WELDS OF ALUMINIUM ALLOY** **H. Mori[1], Q. Zhou[1], K. Koyama[1], F. Miyasaka[2], Y. Murakami[3], Y. Kawahito[3], M. Mizutani[3], S. Katayama[3]** *[1]Osaka University, Graduate School of Eng., Dept. of Mngt. of Industry & Techn., Japan* *[2]Osaka University, Department of Adaptive Machine Systems, Japan* *[3]Osaka University, Joining and Welding Research Institute, Japan*	*R29*
17:00	**EFFECT OF ITO INTERLAYER ON THE Au/$Hg_3In_2Te_6$ SCHOTTKY CONTACT CHARACTERISTICS** **L. Yapeng, C. Liu, L. Fu** *State Key Laboratory of Solidification Processing, School of Materials Science & Eng. Northwestern Polytechnical University, China*	*R31*
17:20	Transfer to Poster Session SEEBLICKSAAL	
17:30	**POSTER SESSION SEEBLICK**	

Session	TUESDAY, DECEMBER 9th, 2014	PART NO.
	POSTER SESSION	
18:00	**LOW-TEMPERATURE COMBUSTION JOINING OF CARBON/CARBON COMPOSITES** **A.A. Nepapushev[1], Ya-Cheng Lin[2], A.S. Rogachev[1,3], P.J. McGinn[2], A.S. Mukasyan[1,2],** [1]*National University of Science and Technology, Russia* [2]*Dept. Chem. & Biomolec. Eng., University of Notre Dame, USA* [3]*Inst. of Structural Macrokinetics & Materials Science Russian Acad. of Sciences, Russia*	*P1*
	THE MECHANISM OF MELTING POINT DEPRESSION AlSi/AlN IN NANOMULTILAYERED SYSTEMS **J. Lipecka[1], J. Janczak-Rusch[1,2], M. Andrzejczuk[1], M. Lewandowska[1], G. Richter[3], L.P.H. Jeurgens[2]** [1]*Warsaw University of Technology, Poland* [2]*Empa, Swiss Federal Laboratories for Materials Science and Technology, Switzerland* [3]*Max Planck Institute for Intelligent Systems, Germany*	*P2*
	EFFECTS OF WARPAGE ON HIP DURING BGA PACKAGING **Z. Zhao[1], Ch. Chen[2], Y. Wang[3], Ch.Y. Park[4], L. Liu[1], J. Cai[2], Q. Wang[2], H. Bai[1], G. Zou[1]** [1]*Dept. of Mechanical Engineering, Tsinghua University, China* [2]*Institute of Microelectronics, Tsinghua University, China* [3]*Training Center for Basic Industry, Tsinghua University, China* [4]*Samsung Electronics Co. Ltd, Korea*	*P3*
	INVESTIGATION OF MEMORY EFFECT IN THE $Ge_2Sb_2Te_5$ THIN FILMS BY DC AND PULSE MEASUREMENTS **P. Lazarenko[1], A. Sherchenkov[1], S. Kozyukhin[2], S. Timoshenkov[1], D. Gromov[1], M. Michaylova[1]** [1]*National Research University of Electronic Technology (MIET), Russia* [2]*Kurnakov Institute of General and Inorganic Chemistry, RAS, Russia*	*P4*
	RECENT R&D RESULTS OF TSINGHUA-FLEXTRONICS SMT LAB **Y. Wang, T. Wang** *Training Center for Basic Industry, Tsinghua University, Beijing 100084, China*	*P5*
	RECENT ACHIEVEMENTS IN NANO/MICRO JOINING RESEARCHES **A. Hirose, T. Sano, T. Ogura** *Intelligent Manfacturing Process Group of Osaka University, Japan*	*P6*
	HERMETIC TLP BONDING OF MEMS FOR HARSH ENVIRONMENTS **G. Spinola Durante[1], R. Jose James[1], S. Mohrdiek[1], M. Despont[2], P. Niedermann[2]** [1]*CSEM SA Alpnach, Switzerland* [2]*CSEM SA Neuchâtel, Switzerland*	*P8*
	LASER INDUCED MICROJOINING **H. Bai[1], L. Liu[1,2], G. Zou[1], and Y.N. Zhou[3]** [1]*Dept. of Mechanical Engineering, Tsinghua University, China* [2]*The State Key Laboratory of Tribology, Tsinghua University, China* [3]*Dept. of Mechanical & Mechatronics Engineering, University of Waterloo, Canada*	*P9*
	PREPARATION AND SEALING OF POLYMER MICROCHANNELS USING EB LITHOGRAPHY TO PATTERN ABSORBER FOR LASER WELDING **I. A. Jones[1], J. Griffiths[2]** [1]*TWI Ltd, Granta Park, UK* [2]*Cavendish Laboratory, University of Cambridge, UK*	*P10*
	BONDABILITY OF Mg_2Si THERMOELECTRIC ELEMENT AND NI ELECTRODE USING Al **T. Tohei[1], S. Fujiwara[1], M. Tominaga[2], T. Jinushi[2], Z. Ishijima[3]** [1]*Hitachi. Ltd., Yokohama Research Laboratory, Japan* [2]*Hitachi Chemical Co., Ltd., Hitachi Powdered Metals, Japan* [3]*Hitachi Chemical Co., Ltd., Japan*	*P11*
	WETTING PROPERTIES OF BOROSILICATE GLASS ON MICROSTRUCTURED KOVAR SURFACES BY HIGH-ENERGY DENSITY BEAM TEXTURING **H. Li[1], M. Tie[1], Z. Li[1] and W. Tillmann[2]** [1]*College of materials science and engineering, Beijing University of Technology, China* [2]*Dortmund University of Technology, Germany*	*P12*
	RECENT ADVANCES IN MICRO- AND NANOJOINING TECHNOLOGIES AT EMPA AND UNIVERSITY OF WATERLOO **L.P.H. Jeurgens[1], Y. N. Zhou[2], J. Janczak-Rusch[1]** [1]*Empa, Swiss Federal Laboratories for Materials Science and Technology, Switzerland* [2]*University of Waterloo, Centre for Advanced Materials Joining, Canada*	*P13*
19:00	Break	
20:00	SWISS GALA DINNER	