

# Oral Presentations

## Wednesday, May 16 (A)

10:00	<b>Opening Remarks (10:00am-10:10am) --- Conference Hall (7<sup>th</sup> Floor)</b> <i>Miyamoto Isamu</i>
10:10	<b>Session 1A: Overview --- Conference Hall (7<sup>th</sup> Floor)</b> <b>Chair: Sugioka Koji, RIKEN (Institute of physical and Chemical research) (Japan)</b>
	<ul style="list-style-type: none"> <li><b>Laser microprocessing in data storage industry</b> (Invited Paper), Chong Tow Chong, DSI (Singapore) [A101]</li> <li><b>Femtosecond pulses for medicine and production technology - Overview of a German national project</b> (Invited Paper), Dausinger Friedrich, University of Stuttgart (Germany) [A086]</li> <li><b>Review on recent progress of laser precision microfabrication in China</b> (Invited Paper), Cheng Zhao Gu, Xu Guoliang, Zhao Quanzhong, Chinese Academy of Sciences (China) [A068]</li> <li><b>History and future prospect of excimer lasers</b> (Invited Paper), Basting Dirk, Lambda Physik (Germany) [A110]</li> </ul>
	<b>Lunch (12:10pm-1:40pm)</b>
13:40	<b>Session 2A: Ultrafast Laser Processing(1) --- Conference Hall (7<sup>th</sup> Floor)</b> <b>Chair: Mazur Eric, Harvard University (USA)</b>
	<ul style="list-style-type: none"> <li><b>Optimum energy absorption of a short-pulse laser in a doped dielectric slab</b>, Ang LayKee, Los Alamos National Laboratory (USA) [A002]</li> <li><b>Sub-Picosecond ion emission from transparent dielectrics</b>, Henyk M., Costache F., Reif J., Brandenburg University of Technology (Germany) [A055]</li> <li><b>Ultrafast laser ablation of dielectrics employing temporally shaped femtosecond pulses</b>, Stoian R., Boyle M., Thoss A., Rosenfeld A., Korn G., Hertel I.V., Max-Born Institute; Ashkensai D., Laser und medizin Technologie GmbH (Germany), Cambell E.E.B., Goteborg University and Chalmers University of Technology (Sweden) [A035]</li> <li><b>Laser-induced expansion, melting and ablation mechanisms of organic materials</b> (Invited Paper), Masuhara Hiroshi, Osaka University (Japan) [A102]</li> </ul>
	<b>Coffee Break (3:10pm-3:30pm)</b>
15:30	<b>Session 3A: Ultrafast Laser Processing (2) --- Conference Hall (7<sup>th</sup> Floor)</b> <b>Chair: Masuhara Hiroshi, Osaka University (Japan)</b>
	<ul style="list-style-type: none"> <li><b>Micromachining and laser processing with ultrashort laser pulses</b> (Invited Paper), Mazur Eric, Harvard University (USA) [A103]</li> <li><b>Precision drilling of metals and ceramics with short and ultrashort pulsed solid-state lasers</b>, Christian Föhl, Breitling D., Jasper K., Radtke J., Dausinger F., University of Stuttgart (Germany) [A087]</li> <li><b>Morphological characterization of various kinds of materials in femtosecond-laser micromachining</b>, Kawahara Kousuke, Kurogi Yasunobu, Matsuo Naoyuki, Yokotani Atsushi, Kurosawa Kou, University of Miyazaki; Sawada Hiroshi, NEC Machinery Corporation (Japan) [A062]</li> <li><b>Ultra-short pulsed laser recrystallization of crystalline silicon</b>, Cho Taeyouli, Hwang David J., Grigoropoulos Costas P., University of California (USA) [A079]</li> </ul>
	<b>Coffee Break (5:00pm-5:20pm)</b>
17:20	<b>Rump Session: (5:20pm – 7:20pm) ---Conference Hall (7<sup>th</sup> Floor)</b> <b>Chair: Dunskey Corey, Electro Scientific Industries (USA)</b> <b>Hoving Willem, Philips Electronics Nederland B.V. (Netherlands)</b>
	<ul style="list-style-type: none"> <li><b>Present status and future prospects of laser precision microfabrication in Japan</b>, Washio Kunihiro, NEC (Japan)</li> <li><b>Present status and future prospects of laser precision microfabrication about former USSR states</b>, Veiko Vadim P., SPIFMO (Russia)</li> <li><b>Overview presentation of Europe's micromachining activities seems to be appropriate</b>, Ostendorf Andreas, Laser Zentrum Hannover e.V. (Germany)</li> <li><b>Present status and future prospects of laser precision microfabrication on government supported programs</b>, Helvajian Henry, Aerospace Corp. (USA)</li> <li><b>Industrial LD application for materials processing – present status and future prospect</b>, Bachmann Friedrich, Rofin-Sinal Laser (Germany)</li> <li><b>LPM technology to be developed in future</b>, Miyamoto Isamu, Osaka University (Japan)</li> </ul>

## Wednesday, May 16 (B)

10:00	<b>Opening Remarks (10:00am-10:10am) --- Conference Hall (7<sup>th</sup> Floor)</b> <i>Miyamoto Isamu</i>
10:10	<b>Session 1A: Overview --- Conference Hall (7<sup>th</sup> Floor)</b> <b>Chair: Sugioka Koji, RIKEN (Institute of physical and Chemical research) (Japan)</b>
	<ul style="list-style-type: none"> <li><b>Laser microprocessing in data storage industry</b> (Invited Paper), Chong Tow Chong, DSI (Singapore) [A101]</li> <li><b>Femtosecond pulses for medicine and production technology - Overview of a German national project</b> (Invited Paper), Dausinger Friedrich, University of Stuttgart (Germany) [A086]</li> <li><b>Review on recent progress of laser precision microfabrication in China</b> (Invited Paper), Cheng Zhao Gu, Xu Guoliang, Zhao Quanzhong, Chinese Academy of Sciences (China) [A068]</li> <li><b>History and future prospect of excimer lasers</b> (Invited Paper), Basting Dirk, Lambda Physik (Germany) [A110]</li> </ul>
	<b>Lunch (12:00pm-1:40pm)</b>
13:40	<b>Session 2B: Systems and Optics (1) --- Training Room (6<sup>th</sup> Floor)</b> <b>Chair: Gower Malcom C., Exitec (UK)</b>
	<ul style="list-style-type: none"> <li><b>Novel ultrafast fiber laser systems and their applications</b> (Invited paper), Endert Heinrich, IMRA (USA) [A108]</li> <li><b>Femtosecond pulsed laser sub-micromachining system</b>, Ngoi K.A., Venkatakrishnan K., Tan B., Nanyang Technological University (Singapore) [A032]</li> <li><b>High-reliable high-power 266-nm all-solid-state UV laser</b>, Kojima Tetsuo, Konno Susumu, Fujikawa Shuichi, Seguchi Masaaki, Takenaka Yushi, Yasui Koji, Mitsubishi Electric Corporation (Japan) [A092]</li> <li><b>Recent developments in precision micromachining using pulsed UV DPSS lasers</b>, Chang Andrew, Somerville Paul, Hannon Terry, Coherent Photonics Group (USA) [A097]</li> </ul>
	<b>Coffee Break (3:10pm-3:30pm)</b>
15:30	<b>Session 3B: Systems and Optics (2) --- Training Room (6<sup>th</sup> Floor)</b> <b>Chair: Jitsuno Takahisa, ILE Osaka University (Japan)</b>
	<ul style="list-style-type: none"> <li><b>12 Watts of UV at 355nm</b>, Dafydd Thomas, <i>Spectra Physics Inc. (USA)</i> [A143]</li> <li><b>300 W XeCl excimer laser for large area TFT laser annealing</b>, Fechner Burkhard, Lambda Physik Japan Co., Ltd. (Japan), Fiebig Michael, Lambda Physik AG, Oesterlin Peter, MicroLas Lasersystem GmbH(Germany), Kobayashi Naoyuki, The Japan Steel Works (Japan) [A051]</li> <li><b>In-situ measurements of VUV optical material under F<sub>2</sub> laser irradiation</b>, Sumitani Akira, Itakura Yasuo, Yoshida Fumika, Kawasa Youichi, Komatsu Ltd.; Wakabayashi Osamu, Mizoguchi Hakanu Gigaphoton Inc. (Japan) [A095]</li> <li><b>What engineers should know about lasers</b>, Witt Manfred, Zugo Technology Pte Ltd. (Singapore) [A019]</li> </ul>
	<b>Coffee Break (4:50pm-5:20pm)</b>
17:20	<b>Rump Session: (5:20pm – 7:20pm) ---Conference Hall (7<sup>th</sup> Floor)</b> <b>Chair: Dunskey Corey, Electro Scientific Industries (USA)</b> <b>Hoving Willem, Philips Electronics Nederland B.V. (Netherlands)</b>
	<ul style="list-style-type: none"> <li><b>Present status and future prospects of laser precision microfabrication in Japan</b>, Washio Kunihiro, NEC (Japan)</li> <li><b>Present status and future prospects of laser precision microfabrication about former USSR states</b>, Veiko Vadim P., SPIFMO (Russia)</li> <li><b>Overview presentation of Europe's micromachining activities seems to be appropriate</b>, Ostendorf Andreas, Laser Zentrum Hannover e.V. (Germany)</li> <li><b>Present status and future prospects of laser precision microfabrication on government supported programs</b>, Helvajian Henry, Aerospace Corp. (USA)</li> <li><b>Industrial LD application for materials processing – present status and future prospect</b>, Bachmann Friedrich, Rofin-Sinal Laser (Germany)</li> <li><b>LPM technology to be developed in future</b>, Miyamoto Isamu, Osaka University (Japan)</li> </ul>

## Thursday, May 17 (A)

9:00	<b>Session 4A: Optics Fabrication --- Conference Hall (7<sup>th</sup> Floor)</b> <b>Chair: Gillner Arnold, Fraunhofer-Institut für Lasertechnik (Germany)</b> <ul style="list-style-type: none"> <li>• <b>Laser shaping of diamond for IR diffractive optical elements</b> (Invited Paper), Konov Vitali, Kokonenko Vitali, Pimenov Sergei, Prokhorov Alexander, General Physics Institute, Moscow, Pavelyev Vladimir, Soifer Victor, Institute of Image Processing Systems, Samara (Russia) [A071]</li> <li>• <b>Laser ablative shaping of microoptics for laser diode and optical fiber</b>, Jitsuno Takahisa, Institute of Laser Engineering, Osaka University; Tokumura K., Nalux Co. Ltd.; Tamamura H., Sony/Tektronix Co. (Japan) [A070]</li> <li>• <b>Laser ablation based technique for flexible fabrication of microlenses in polymer materials</b>, Naessens Kris, Van Daele Peter, Baets Roel, Universiteit Gent / IMEC (Belgium) [A067]</li> <li>• <b>Holographic optical element for laser soldering</b> Nakahara Sumio, Kansai University (Japan) [A100]</li> </ul>
	<b>Coffee Break (10:30am-10:50am)</b>
10:50	<b>Session 5A: Microfabrication and Microstructuring --- Conference Hall (7<sup>th</sup> Floor)</b> <b>Chair: Helvajian Henry, The Aerospace Corporation (USA)</b> <ul style="list-style-type: none"> <li>• <b>Laser micro-fabrications: from present to future applications</b> (Invited Paper), Lim Gnian Cher, Gintic (Singapore) [A088]</li> <li>• <b>Generation of periodic microstructures with femtosecond laser pulses</b>, Tönshoff H.K., Ostendorf A., Egbert A., Korte F., Bauer T., Laser Zentrum Hannover e.V. (Germany) [A122]</li> <li>• <b>Progressive growth of tungsten microcones using nanosecond pulsed-Nd:YAG laser irradiation in various atmospheres</b>, Kawakami Yujii, Ozawa Eiichi, Vacuum Metallurgical Co., Ltd. (Japan) [A029]</li> <li>• <b>Effects of inter-pulse and intra-pulse shaping during laser percussion drilling</b>, Low David, Li L., University of Manchester Institute of Science and Technology (UMIST) (UK) [A034]</li> </ul>
	<b>Lunch (12:20pm-1:30pm)</b>
13:30	<b>1:30pm-2:30pm: Poster Presentation</b>
14:30	<b>Session 6A: Advanced Microfabrication Technology --- Conference Hall (7<sup>th</sup> Floor)</b> <b>Chair: Holmes Andrew, University of London (UK)</b> <ul style="list-style-type: none"> <li>• <b>Laser processes for manufacturing micro devices in chemistry and biotechnology</b> (Invited Paper), Gillner Arnold, Fraunhofer-Institute für Lasertechnik (Germany) [A109]</li> <li>• <b>Laser ablation patterning of dielectric layer stacks for 193nm mask fabrication</b>, Ihlemann Jürgen, Rubahn Katharina, Laser-Laboratorium Göttingen; Thielsch Roland, Fraunhofer Institute (Germany) [A061]</li> <li>• <b>Precision machining of innovative materials using 157 nm excimer laser radiation</b>, Ostendorf Andreas, Laserzentrum Hannover; Stamm Uwe, Lambda Physik AG (Germany) [A096]</li> <li>• <b>Characterization of fused silica ablation by F<sub>2</sub>-KrF excimer laser multiwavelength excitation process</b>, Obata Kotaro, Sugioka Koji, Akane Toshimitsu, Midorikawa Katsumi, RIKEN (The institute of physical and chemical research), Aoki Naoko, Toyoda Koichi, Science University of Tokyo (Japan) [A084]</li> <li>• <b>Laser writing of nano-structure on silicon (100) surfaces with particle enhanced optical irradiation</b>, Lu Y.F., Zhang L., Song W.D., Zheng Y.W., Luk'yanchuk B.S, National University of Singapore, Data Storage Institute (Singapore) [A005]</li> <li>• <b>GaN micro machining by short wavelength pulsed laser irradiation</b>, Akane Toshimitsu, Sugioka Koji, Midorikawa Katsumi, RIKEN (The Institute of Physical and Chemical Research), Obata Kotaro, Aoki Naoko, Toyoda Koichi, Science University of Tokyo (Japan) [A089]</li> </ul>
	<b>Transport to Cruise (4:40pm-5:00pm)</b>
17:00	<b>Cruise Excursion (5:00pm-8:00pm)</b>

## Thursday, May 17 (B)

9:00	<b>Session 4B: Fundamental Aspects (1) --- Training Room (6<sup>th</sup> Floor)</b> <b>Chairs: Liu DaMing, Data Storage Institute (Singapore)</b> <ul style="list-style-type: none"> <li>• <b>Particle on the surface: Basic physical problems related to laser cleaning</b> (Invited Paper), Luk`yanchuk B.S., Zheng Y.W., Lu Y.F., DSI (Singapore) [A033]</li> <li>• <b>Microstructures formed on silicon wafer by CO<sub>2</sub> Laser irradiation</b>, Wang Weijie, Lu Yong Feng, An Chenwu, Hong Minghui, DSI (Singapore) [A040]</li> <li>• <b>Dynamical observation of laser-induced damages made in inside of transparent materials</b>, Ito Yoshiro, Kiyoku Satoshi, Ogura Tsutomu, Department of Mechanical Engineering, Nagaoka University of Technology; Mohri Naotake, Department of Precision Engineering, The University of Tokyo (Japan) [A081]</li> <li>• <b>Observation of temporary degeneration of material transmittance under strong laser irradiation</b>, An C.W, Ler K.L, Yuan Y, Goh Y.W, Hong M.H and Lu Y.F, DSI (Singapore) [A043]</li> </ul>
	<b>Coffee Break (10:30am-10:50am)</b>
10:50	<b>Session 5B: Fundamental Aspects(2) --- Training Room (6<sup>th</sup> Floor)</b> <b>Chairs: Veiko Vadim P., St. Petersburg Institute of fine Mechanics and Optics (Russia)</b> <ul style="list-style-type: none"> <li>• <b>Fundamentals of particle adhesion and removal from surfaces</b> (Invited Paper), Rajiv K. Singh, University of Florida (USA) [A128]</li> <li>• <b>Scattering of evaporated particles in ultrashort-pulse laser ablation</b>, Ohmura Etsuji, Osaka University (Japan) [A111]</li> <li>• <b>The fundamental aspect of microscale laser bending</b>, Xu XianFan, School of Mechanical Eng., Purdue University (USA) [A085]</li> <li>• <b>Laser induced rear ablation of metal thin films</b>, Sano Tomokazu, Nakayama Takayuki, Yamada Hirokazu, Miyamoto Isamu, Osaka University (Japan) [A118]</li> </ul>
	<b>Lunch (12:20pm-1:30pm)</b>
13:30	<b>1:30pm-2:30 pm: Poster Presentation</b>
14:30	<b>Session 6B: Pulsed Laser Deposition --- Training Room (6<sup>th</sup> Floor)</b> <b>Chair: Okada Tatsuo, Kyushu University (Japan)</b> <ul style="list-style-type: none"> <li>• <b>Pulsed-laser deposition of carbon and nitride materials</b> (Invited Paper), Ren Zhong Min, Lu Y.F., Huang S.M., He Z.F., Hong M.H., Chong T.C., Data Storage Institute, National University of Singapore (Singapore) [A012]</li> <li>• <b>Pulsed laser deposition of ceramics and diamond like carbon on PMMA for tribological application</b>, Schlaghecken G., Perera Y., Kreutz E.W., Poprawe R., Lehrstuhl für Lasertechnik (Germany) [A064]</li> <li>• <b>Pulsed laser deposition of VN films on Si; T-the optical strength of films in UV region</b>, Nanai L., Nagy T., Univ. of Szeged (Hungary); Fernandez G., Luches A., Univ. of Lecce (Italy) [A120]</li> <li>• <b>Growth of (110) and (001)-oriented PZT thin films on amorphous SiO<sub>2</sub> by pulsed laser deposition</b>, Zhao Jing, Lu Li, Thompson C.V, <i>National University of Singapore</i>; Lu Y.F, Song W.D, <i>Data Storage Institute (Singapore)</i> [A021]</li> <li>• <b>Pulsed laser deposition of nanocrystalline ZnSe:N thin film</b>, Xu Ning, Fudan University (China) [A028]</li> <li>• <b>Fabrication of Ce:YIG film with different composition by pulsed-laser deposition</b>, Nakata Yoshiki, Tashiro Yuko, Okada Tatsuo, Maeda Mitsuo, Higuchi Sadao, Ueda Kiyotaka, Kyushu University (Japan) [A065]</li> </ul>
	<b>Transport to Cruise (4:40pm-5:00pm)</b>
17:00	<b>Cruise Excursion (5:00pm-8:00pm)</b>

## Friday, May 18 (A)

9:00	<b>Session 7A: Microsystems and Microelements --- Conference Hall (7<sup>th</sup> Floor)</b> <b>Chair: Konov Vitali I, General Physics Institute, Moscow (Russia)</b> <ul style="list-style-type: none"> <li><b>Laser processes for MEMS manufacture</b> (Invited paper), Holmes Andrew, Imperial College, University of London (UK) [A104]</li> <li><b>Laser beam adjustment of thin metal plates</b>, Frank Meyer-Pittroff, University of Erlangen-Nuremberg (Germany) [A013]</li> <li><b>Laser micromachining of micropumps</b>, Mai Tuan Anh, Gintic Institute of Manufacturing Technology (Singapore) [A058]</li> <li><b>Laser volumetric patterning for embedded interface processing in a photostructurable Glass/Ceramic material</b>, Hansen W., Fuqua P., Helvajian H., The Aerospace Corporation (USA) [A123]</li> </ul>
	<b>Coffee Break (10:30am-10:50am)</b>
10:50	<b>Session 8A: Industrial Applications (1) --- Conference Hall (7<sup>th</sup> Floor)</b> <b>Chair: Sepold Gerd, University of Blemen (Germany)</b> <ul style="list-style-type: none"> <li><b>Ultra line-narrowed F<sub>2</sub> laser for microlithography</b> (Invited Paper), Ariga Tatsuya, Watanabe Hidenori, Kumazaki Takahito, Kitatochi Naoki, Sasano Kotaro, Ueno Yoshifumi, Nishisaka Toshihiro, Nohdomi Ryoichi, Hotta Kazuaki, Mizoguchi Hakaru, Nakao Kiyoharu, Association of Super-Advanced Electronics Technologies (ASET) (Japan) [A117]</li> <li><b>High-resolution 157nm imaging for lithography and micromachining applications</b>, Gower Malcolm, Cashmore Julian, Whitfield Mike, Grünewald Philipp, Exitech Ltd. (UK) [A074]</li> <li><b>Developments in laser welding of plastics using high power diode lasers</b>, Hoult Tony, Apter Merrill, Chang Andrew, Coherent Photonics Group (USA) [A098]</li> <li><b>Polymer welding with lasers: chances and hurdles</b>, Bachmann Friedrich, Rofin-Sinar Laser GmbH (Germany) [A057]</li> </ul>
	<b>Lunch (12:20pm-1:20pm)</b>
13:20	<b>1:20pm-2:20pm: Poster Presentation</b>
14:20	<b>Session 9A: Industrial Applications (2) --- Conference Hall (7<sup>th</sup> Floor)</b> <b>Chair: Washio Kunihiko, NEC Corporation (Japan)</b> <ul style="list-style-type: none"> <li><b>High-speed microvia formation with UV YAG lasers</b> (Invited Paper), Dunskey Corey, Matsumoto Hisashi, Simenson Glenn, Electro Scientific Industries (USA) [A072]</li> <li><b>High accuracy laser mask repair technology using ps UV solid state laser</b> (Invited Paper), Morishige Yukio, NEC (Japan) [A106]</li> <li><b>The study of BGA singulation with a pulsed Nd:YAG laser</b>, Kwangyeol Baek, Kyoungcheol Lee, Cheon Lee, Inha university (Korea) [A036]</li> <li><b>A study of glass cutting by laser</b>, Kang, Hyoung-Shik, Hong, Soon-Kug, Oh, Seok-Chang, Choi, Jong-Yoon, Song, Min-Gyu, LG Production Engineering Research Center (Korea) [A030]</li> </ul>
	<b>Coffee Break (4:00pm-4:20pm)</b>
16:20	<b>Session 10A: Industrial Applications (3) --- Conference Hall (7<sup>th</sup> Floor)</b> <b>Chair: Dausinger Friedrich, University of Stuttgart (Germany)</b> <ul style="list-style-type: none"> <li><b>Excimer laser crystallized poly-Si TFTs on plastic substrates</b> (Invited Paper), Gosain Dharam Pal, Frontier Science Laboratories, Yokohama Research Centre, Sony Corporation (Japan) [A073]</li> <li><b>Precise laser-assisted 3D- microstructuring on metals and alloys</b> (Invited Paper), G. Sepold, Univ. Blemen (Germany) [A124]</li> <li><b>Comparison of micro drilling strategies for ceramics using frequency convertible Nd:YAG and Excimer lasers</b>, Tönshoff H.K., Ostendorf A., Körber K., Meyer K., Laser Zentrum Hannover e.V. (Germany) [A076]</li> <li><b>Laser adjustment, a novel technique to obtain fast, sub-micron accuracy in mass production</b>, Willem Hoving, Philips Electronics Nederland B.V. (Netherlands) [A121]</li> </ul>
18:00	<b>Closing Remarks (6:00pm-6:10pm) --- Conference Hall (7<sup>th</sup> Floor)</b> <b>Lu YongFeng</b>



## Friday, May 18 (B)

9:00	<b>Session 7B: Laser Cleaning Workshop --- Training Room (6<sup>th</sup> Floor)</b> <b>Chair: Fotakis C., FORTH-IESL (Greece)</b>
	<ul style="list-style-type: none"> <li>• <b>Physical principles of Steam Laser Cleaning</b> (Invited Paper), Paul Leiderer, Konstanz University (Germany) [A142]  <b>This talk of Prof. P. Leiderer will replace the talk of Prof. A.C. Tam who had left us early this year.</b></li> <li>• <b>The emergence of laser cleaning for hi-tech industrial applications</b> (Invited Paper), Tam A.C., IBM Almaden research center (USA) [A125]</li> <li>• <b>Laser induced surface cleaning from diamond particles</b> (Invited Paper), Konov V.I., RAS; Kononenko V.V., Lomonosov A.M., Mihalevich V.G., Pimenov S.M., Zhuk K.A., General Physics Institute Moscow (Russia) [A138]</li> <li>• <b>Wavelength dependence of laser cleaning for field emitter arrays</b> (Invited Paper), Takai Mikio, Suzuki Naoki, Yavas Oguz, (Japan) [A126]</li> </ul>
	<b>Coffee Break (10:30am-10:40am)</b>
10:40	<b>Session 8B: Laser Cleaning Workshop --- Training Room (6<sup>th</sup> Floor)</b> <b>Chairs: Takai M., (Japan)</b> <b>Lu YongFeng, Data Storage Institute, National University of Singapore (Singapore)</b>
	<ul style="list-style-type: none"> <li>• <b>Laser technology of artworks and antiquities: Fundamental aspects and prospects</b> (Invited Paper), Fotakis C., Georgiou S., Zafiropulos V., Heraklion, FORTH-IESL (Greece) [A107]</li> <li>• <b>Laser cleaning of silicon wafers – mechanisms and efficiencies</b> (Invited Paper), Mosbacher M., Münzer H.-J., Dobler V., Bertsch M., Dubbers O., Mühlberger T., Schrems G., Boneberg J., Bäuerle D., Solis J., Oltra R., Leiderer P., Runge B.U., (Germany); (Austria); (Spain); (France) [A127]</li> <li>• <b>Dry laser cleaning threshold fluence – How can it be measured accurately?</b> (Invited Paper), Fernandes Alanna, Kane Deborah, Physics Department, Macquarie University (Australia) [A069]</li> <li>• <b>Liquid-assisted laser cleaning with pulsed ultraviolet, visible and near-IR radiation</b> (Invited Paper), Grigoropoulos Costas P., University of California (USA) [A129]</li> </ul>
	<b>Lunch (12:40pm-1:20pm)</b>
13:20	<b>1:20pm-2:20pm: Poster Presentation</b>
14:20	<b>Session 9B: Laser Cleaning Workshop --- Training Room (6<sup>th</sup> Floor)</b> <b>Chair: Arnold Nikita, Johannes Kepler Uni. Linz (Austria)</b>
	<ul style="list-style-type: none"> <li>• <b>Nonlinear surface waves, application to laser cleaning</b> (Invited Paper), Mikhalevich Vladislav G., (Russia) [A130]</li> <li>• <b>Peculiarities of steam laser cleaning</b> (Invited Paper), Veiko Vadim P., SPIFMO (Russia) [A131]</li> </ul>
15:20	<b>Session 10B: Laser Cleaning Workshop --- Training Room (6<sup>th</sup> Floor)</b> <b>Chair: C. P. Grigoropoulos, University of California (USA)</b>
	<ul style="list-style-type: none"> <li>• <b>A perspective on dry laser cleaning for semiconductor manufacturing</b> (Invited Paper), Vereecke G, Röhr E, VanHoneymissen J.A.B, Heyns M.M, IMEC (Belgium) [A133]</li> <li>• <b>A study on parameter optimization, discoloration of pigments and yellowing effect in laser cleaning applications</b> (Invited Paper), Zafiropulos V., Manousaki A., (Greece); Luk'yanchuk B., DSI (Singapore) [A132]</li> </ul>
	<b>Coffee Break (4:20pm-4:30pm)</b>
16:30	<b>Session 11B: Modification --- Training Room (6<sup>th</sup> Floor)</b> <b>Chair: Hong MingHui, Data Storage Institute (Singapore)</b>
	<ul style="list-style-type: none"> <li>• <b>High resolution laser flash photography for probing the solidification of the new double laser recrystallization process</b>, Minghong Lee, Seungjae Moon, and Costas P. Grigoropoulos, University of California, (USA); Hatano Mutsuko, Hitachi Laboratory, Hitachi Ltd., (Japan) [A004]</li> <li>• <b>Synthesis of pure C40 TiSi<sub>2</sub> for Si wafer fabrication</b>, Chen S.Y., Shen Zexiang, NUS; See A.K., Chan L.H., Chartered Semiconductor Manufacturing Ltd., (Singapore) [A080]</li> <li>• <b>Application of photosensitive GeO<sub>2</sub>-B<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub> thin films to optical waveguide</b>, Nishiyama Hiroaki, Miyamoto Isamu, Osaka University; Nishii Junji, Kintaka Kenji, Osaka National Research Institute (Japan) [A090]</li> <li>• <b>Domain change of liquid crystals caused by infrared laser irradiation using free electron laser system</b>, Shimizu Yo, Mononobe Hiroto, Osaka National Research Institute, AIST-MITI; Heya Manabu, Awazu Kunio, Institute of Free Electron Laser, Graduate School of Engineering, Osaka University (Japan) [A052]</li> </ul>
	<b>Break (5:50pm-6:00pm)</b>
18:00	<b>Closing Remarks (6:00pm-6:10pm) --- Conference Hall (7<sup>th</sup> Floor)</b> <b>Lu YongFeng</b>