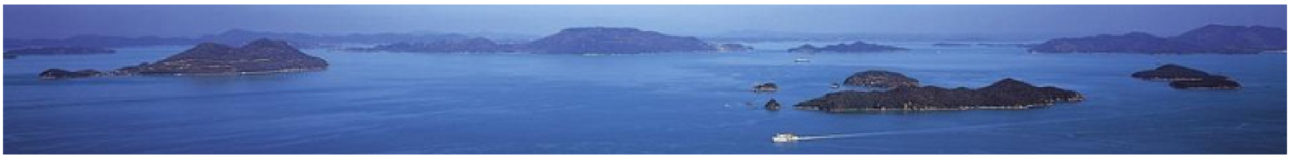

The 12th International Symposium on Laser Precision Microfabrication

LPM2011

JUNE 7 - 10, 2011

Kagawa International Conference Hall (6F) & Sunport Hall Takamatsu (5F&6F)
Takamatsu, Kagawa, Japan

http://www.jlps.gr.jp/lpm/lpm2011/

ORGANIZERS:	**JLPS** - Japan Laser Processing Society, Japan **AIST** - National Institute of Advanced Industrial Science and Technology, Japan **RIKEN** - Advanced Science Institute, Japan

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http://www.jlps.gr.jp/lpm/lpm2011/

STEP 2: E-MAIL YOUR ABSTRACT(S). (RE: LPM2011 ABSTRACT SUBMISSION)
To : **lpm-abst@jlps.gr.jp**

ABSTRACT SUBMISSION DUE DATE: No later than 17:00, Fri., December 17, 2010 (JST)

▶ *ONLINE REGISTRATION*

Online Registration System will be open on:	**February 1, 2011(JST)**
Early Registration Due Date:	**April 15, 2011 (JST)**
Registration Due Date for Presenting Authors:	**April 15, 2011 (JST)**
Late Registration Due Date:	**May 16, 2011 (JST)**

▶ *TOPICS*

1. **Fundamental aspects (Dynamics, modeling, simulation, etc.)**
2. **Process monitoring and control**
3. **Laser and Photochemistry**
4. **Laser-based direct-write techniques**
5. **Ultra-short pulse laser processing**
6. **VUV laser and X-ray processing**
7. **Advanced laser processing (Fiber laser, disc laser, FEL, etc.)**
8. **Micro-patterning and micro-structuring**
9. **Micro-machining**
10. **3-D micro- and nano-fabrication**
11. **Drilling and cutting**
12. **Welding and bonding**
13. **Micro-forming**
14. **Wafer dicing**
15. **Marking and trimming**
16. **Packaging and mounting process**
17. **Lithography (including EUV source and application)**
18. **Manufacture of micro devices and systems**
19. **Film deposition and synthesis of advanced materials (PLD, CVD, etc)**
20. **Medical and biological applications**
21. **Optics and systems for laser microprocessing**
22. **Laser devices**
23. **Industrial applications**
24. **Others**
25. **SP L1) Interactions of liquids and light: Optofluidics and biochips**
26. **SP L2) Laser induced deposition**
27. **SP L3) Nanomaterials and nanostructures**

►SPECIAL SESSIONS

SP L1) " Interactions of Liquids and Light: Optofluidics and Biochips "

Session Organizer: Craig B. Arnold (Princeton University, USA)

Short Description:

"The interaction of light with liquids has becoming increasingly important in a number applications ranging from advanced optics and laser machining to biological imaging and materials processing. In some instances, one considers the fluid as a guiding or index modifying material that affects the propagation of light through the media leading to novel applications in sensing, imaging, or materials processing. Alternatively cases in which light causes changes to the fluid such as laser-induced cavitation or photochemical modification allows for non-traditional processes such as laser printing, materials synthesis, or biological applications. This special session is designed to promote an interdisciplinary forum bringing together talks on the fundamental science and applied technology in this emerging area. Researchers are encouraged to contribute papers on all relevant topics such as, microfluidic photonic devices (lasers, waveguides,etc.), laser based ink printing, fluidic lenses, laser induced cavitation, optical trapping, biological sensors, fluidic imaging, lab on a chip and other issues."

SP L2) " Laser Induced Deposition "

Session Organizer: Bert Huis in 't Veld (University of Twente, The Netherlands)

Co-Organizer: Alberto Piqué (Naval Research Laboratory, USA)

Short Description:

"Laser Induced deposition is a very attractive family of processes for making features and patterning on a micro scale i.e. details smaller than 10 µm and as small as 100 nm. Processes that belong to this family are: Laser assisted CVD, Laser assisted ALD, Pulsed Laser Deposition, Laser induced forward transfer of metals, Laser Decal Transfer, Laser induced backward deposition. A session should give an overview of processes, present the potential of laser nanomachining and show recent results of some processes. A subdivision into gas, liquid or solid transfer is an attractive option."

SP L3) " Nanomaterials and Nanostructures "

Session Orgranizers:

Shoji Maruo (Yokohama National University, Japan), Kosei Ueno (Hokkaido University, Japan)

Short Description:

"Nanomaterials such as nanoparticles, nanotubes and nanowires have attracted much attention for their abilities in enhancing luminescence, absorption and temperature at the nanoscale. Nanostructures such as nanogaps and nanoprobes are also remarkable in generating strong optical fields due to surface plasmon excitation. These unique features of nanomaterials and nanostructures have been employed in various fields including nanolithography, multiphoton microfabrication, and biosensors. This session covers topics related to applications of nanomaterials and nanostructures in lithography, three-dimensional microfabrication, plasmonics, metamaterials, biosensors, lab-on-a-chip devices and microelectromechanical systems. "

►AIM AND SCOPE

Welcome to join us at LPM2011!

Miniaturization and high precision are rapidly becoming requirements in many industrial processes and products. As a result, there is greater interest in the use of laser micro fabrication approaches to achieve these goals. The International Symposium on Laser Precision Microfabrication (LPM) is alternatively held in Japan and in other host countries. To date, LPM has been successfully hosted in Omiya, Singapore, Osaka, Munich, Nara, Williamsburg, Kyoto, Vienna, Quebec, Kobe and Stuttgart. The aim of this symposium is to provide a forum for discussion of fundamental aspects of laser-matter interaction, the state-of-the-art of laser materials processing, and topics for the next generation with fundamental scientists, end users and laser manufactures. We expect that LPM2011 would play an important role not only for understanding fundamental knowledge of laser precision microfabrication but also forecasting future technologies to be developed and the future laser market.

►VENUE

Sunport Takamatsu, Takamatsu City, Kagawa Prefecture, Japan

Takamatsu is known as the gateway to the very charming Shikoku Island. Sunport Takamatsu, built on the idea of creating a new Tamamo Castle for the 21st Century, centered on Takamatsu Station, has now had its grand opening. The Kagawa International Conference Hall is in the Takamatsu Symbol Tower, the core facility of Sunport Takamatsu. It is a complex that combines the various establishments of Kagawa Prefecture, Takamatsu City and private firms. It will create activities by exhibiting the functions of globalization and informatization.

Venue Website: http://www.symboltower.com/hall/en/index.html

Photo © Takamatsu Convention & Visitors Bureau

▶ REGISTRATION FEE

(JPY= Japanese Yen)

REGISTRATOIN TYPE	JLPS MEMBER	NON-MEMBER	INCLUDES:
EARLY Full Registration (by April, 15)	**JPY 54000**	**JPY 60000**	"LPM2011 Symposium Program & Technical Digest", "Proceedings of LPM 2011", Banquet, and Exhibition
LATE Online Registration (by May 16)	**JPY 70000**	**JPY 76000**	
ON-SITE Registration (from June 7)	**JPY 70000**	**JPY 76000**	
ONE-DAY Participant	**JPY 36000**	**JPY 39000**	"LPM2011 Symposium Program & Technical Digest", " Proceedings of LPM2011", Exhibition (Banquet excluded)
STUDENT (Student ID Required)	**JPY 12000**		
BANQUET (Banquet ticket will NOT be sold on site.)	**One Day Participant**		**JPY 12000**
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	Accompanying person* with Full-Registered Participant		**JPY 6000**
	1st Accompanying person* with Invited Speaker		**Free**
	2nd Accompanying person* with Invited Speaker		**JPY 6000**

* Accompanying person is limited to family member only.

▶ PROCEEDINGS OF LPM2011

"Proceedings of LPM2011" will be published online after the symposium. All authors should submit Full Papers along with Copyright Transfer Forms to LPM2011 Secretariat no later than June 7, 2011 (JST).

STEP 1: DOWNLOAD FILES from LPM2011 website.

1. **Manuscript Guidelines (Templates)**
2. **Copyright Transfer Form**

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MANUSCRIPT SUBMISSION DUE DATE: JUNE 7, 2011 (JST)

▶ FREE JOURNAL "JLMN-Journal of Laser Micro/Nanoengineering"

JLMN- JOURNAL OF LASER MICRO/NANOENGINEERING

The authors have good chances to publish their proceedings manuscripts in "Journal of Laser Micro/Nano-engineering". The manuscripts will be peer reviewed. Authors who wish to submit their manuscripts to this Journal should check the box in the Copyright Transfer Form of "Proceedings of LPM2011".

Then the submitted manuscript will be automatically passed to the review process. The authors can suggest possible reviewers. If the authors have possible reviewers, please attach the list of at least three names, with full information on postal code(s) (zip code(s)) , e-mail addresses, telephone number(s), and fax number(s), to your Copyright Transfer Form.

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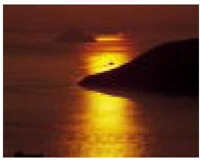

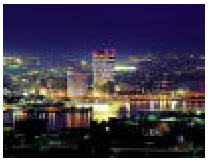

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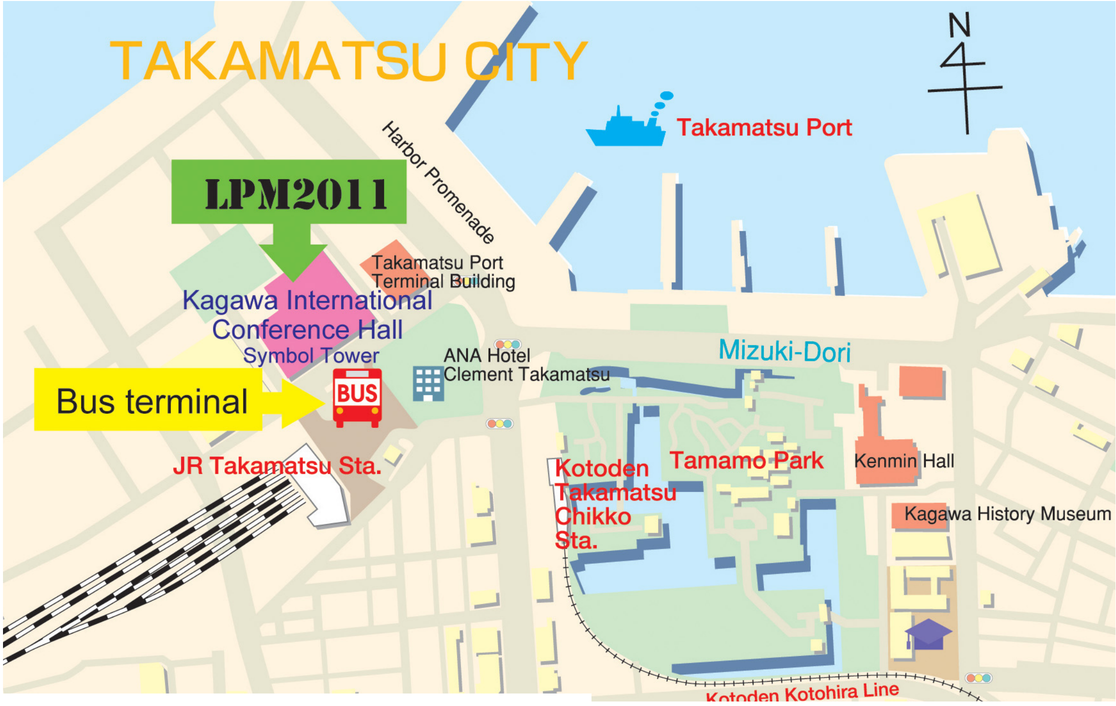

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70 min. by domestic air from Haneda to Takamatsu Airport
35 min. by bus from Takamatsu Airport to Takamatsu Station
1-2 min. on foot from Takamatsu Station to the Venue
http://www.narita-airport.jp/en/index.html

●From Haneda Airport (Tokyo Int’l Airport) (HND)
New international terminal is open from Oct. 21, 2010.
It will be accessible from 17 worldwide and 49 domestic cities.
Direct flight to Takamatsu will be available.
http://www.tokyo-airport-bldg.co.jp/en/

●From Kansai International Airport (KIX)
50 min. by train (JR Haruka) to JR Shin-Osaka Station
50 min. by bullet train (Nozomi) from Shin-Osaka to Okayama
55 min. by JR Marine Liner from Okayama to Takamatsu
1-2 min. on foot from Takamatsu Station to the Venue
http://www.kansai-airport.or.jp/en/index.asp

※Airport bus is also available. 200 min. from KIX to Takamatsu.
http://www.kate.co.jp/pc/e_time_table/e_takamatsu.html

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