

# LPM2021

The 22nd International Symposium  
on Laser Precision Microfabrication

**June 8-11, 2021**

Hirosaki, Aomori, Japan



## The 22nd International Symposium on Laser Precision Microfabrication Hirosaki Citizen Hall, Hirosaki, Aomori, Japan

**June 8 to June 11, 2021**

<http://www.jlps.gr.jp/lpm/lpm2021/>

### **AIM AND SCOPE:**

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, Stuttgart, Takamatsu, Washington D.C., Niigata, Vilnius, Kokura, Xi'an, Toyama, Edinburgh, Hiroshima and Dresden (Web Conference). 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 LPM2021 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.

### **CHAIR, CO-CHAIRS, STEERING COMMITTEE CHAIR:**

General Chair: Dr. Hiroyuki Niino, AIST, Japan

Co-Chairs: Prof. Yongfeng Lu,

University of Nebraska-Lincoln, USA

Prof. Michael Schmidt,

Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany

Prof. Yasuhiro Okamoto, Okayama University, Japan

Steering Committee Chair:

Prof. Yasutaka Hanada, Hirosaki University, Japan

### **ORGANIZED BY:**

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## TOPICS:

1. Fundamental aspects (Dynamics, modeling, simulation, etc.)
2. Laser and photochemistry
3. Ultra-short pulse laser processing
4. Burst ablation
5. Advanced laser processing (Fiber laser, disc laser, FEL, etc.)
6. Glass/Ceramic processing
7. VUV laser and X-ray processing
8. Nanotechnology
9. Nano ripple formation
10. Nano- and micro-particles  
(including laser synthesis and processing in liquids)
11. Micro-machining
12. Micro-drilling and micro-cutting
13. Micro-welding and micro-bonding
14. Micro-forming
15. Micro-patterning and micro-structuring
16. Surface processing (Texturing, cleaning, annealing, modification, etc.)
17. 3-D micro- and nano-fabrication
18. Film deposition and synthesis of advanced materials (PLD, CVD, etc.)
19. Laser-based direct-write techniques
20. Laser-induced forward transfer (LIFT) techniques
21. Lithography (including EUV source and application)
22. Laser devices
23. Beam shaping
24. Optics and systems for laser microprocessing
25. Process monitoring and control
26. Packaging and mounting process
27. Manufacture of micro devices and systems
28. Medical and biological applications
29. Industrial applications
30. Others
31. Special Session (SS1): TBA
32. Special Session (SS2): TBA
33. Special Session (SS3): TBA

### About Hirosaki:

Hirosaki is located in the southwestern part of the northernmost prefecture on Japan's main island, Aomori prefecture. The city is blessed with beautiful and grand natural resources where you can enjoy the nature of Japan throughout the four seasons. The city is also known as a castle town of cherry blossoms and apples. You can also enjoy delicious seafoods from the surrounded seas and sake. The conference venue is located in Hirosaki park to enjoy the sight of the castle.



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