

# PROCEEDINGS OF SPIE

*Pacific Rim Laser Damage 2014*

## **Optical Materials for High Power Lasers**

**Takahisa Jitsuno**  
**Jianda Shao**  
**Wolfgang Rudolph**  
*Editors*

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# Introduction

The Pacific Rim Laser Damage (PLD) conference was initiated by Prof. Jianda Shao of Shanghai Institute of Optics and Fine Mechanics, China in 2009. This conference was held as a satellite meeting of the SPIE Laser Damage Symposium at Boulder. The purpose of this meeting is to communicate with researchers in the field of laser damage and related phenomena especially in the Pacific Rim area. Normally, the PLD meeting is held biyearly in Shanghai, but due to special request of Prof. Shao, the PLD'14 meeting was held in Japan as a part of the OPIC conference.

## **PLD'14 included 7 sessions:**

1. Joint Session  
This joint session was proposed by Prof. T. Taira, (Conference Chair of LIC 2014, of the Institute for Molecular Science, Japan), because LIDT is an important factor for laser ignition devices. This session included 5 talks on laser process and damage phenomena.
2. Plenary Session  
This session included Conference Co-Chairs (Prof. J. Shao and Prof. T. Jitsuno), with a talk about revolutionary grating fabrication from Plymouth Grating Laboratory (D. Smith).
3. High Power Laser Damage  
This session included 5 talks on high energy and high peak power laser systems.
4. Poster Session  
The Poster session included 8 reports on LIDS, laser systems and optical materials.
5. Nonlinear Crystals and Laser  
This session included reports on nonlinear crystal and laser amplifier.
6. High Laser Damage Resistant Coating  
Coating, material, and damage detection were reported.
7. Defect, Contamination, Polishing and Surface Damage  
10 papers on the fundamental research of this subject were reported.

We had 20 papers in PLD'14. The number of registered attendees for PLD'14 was 52, but we had many additional attendees from other OPIC conferences. PLD'14 was a small conference, but we had useful discussions and mutual communication. The special contributions of SPIE and SIOM should be mentioned. This conference is supported by the Chinese Academy of Science as a Japan-China Bilateral Forum. It is also a part of activities in the Project for Creation of Research Platform and Sharing of Advanced Research Infrastructure promoted by the Ministry of Education of the Japanese Government.

**Takahisa Jitsuno  
Jianda Shao  
Wolfgang Rudolph**

