

# PROCEEDINGS OF SPIE

*2015 International Conference on  
Optical Instruments and Technology*

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## ***Advanced Lasers and Applications***

**Jianqiang Zhu  
Chunqing Gao**  
*Editors*

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## Introduction

The conference was held 17–19 May, in Beijing, China, as part of the 2015 International Conference on Optical Instruments and Technology. It provided a technical forum for reporting and learning about the latest research and development in science, as well as for launching new applications and technologies in engineering.

The conference was organized into technical sessions on high power laser systems and technologies, ultrafast laser and technologies, advanced laser systems, and laser applications. A poster session was also included. A total of 52 presentations, including 26 posters, were featured at the conference. The latest achievements from all over the world, especially in China, in the fields of fiber lasers, high power lasers and materials, and laser applications have been reviewed in those presentations. The invited lectures cover the achievements on laser technology and its applications, such as scalable beam combining for high power fiber/ceramic lasers, high-power all-solid-state lasers and their laser processing applications in the components of a car, plasma amplification: creating short intense light pulses using plasmas, advanced solid state femtosecond lasers and application for frequency comb, dissipative-soliton fiber laser, high power thulium-doped fiber laser operates in various regime, large scale MLDGs for high power laser system in China, polycrystalline Transparent RE:YAG ceramic for high power solid state lasers, ultrafast laser enabling ultra-broad-band-spectrum highly antireflective surfaces.

As chairs of this conference, we would like to express our thanks to all those participants who contributed through their presentations, to the session chairs, and to the program committee members.

**Jianqiang Zhu**  
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