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Yongkun Ding
Guobin Feng
Dieter H. H. Hoffmann
Jianlin Cao
Yongfeng Lu
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Contents

Authors

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Introduction

The Fourth International Symposium on Laser Interaction with Matter (LIMIS 2016) was successfully held in Chengdu, China, in November, 2016. It was truly our great honor to organize this symposium. Around 260 participants, including both oral and poster presentations, participated this year, and 81 papers were selected for publication. They encompassed six topics:

- Laser Irradiation Effects and Mechanisms focused on the laser irradiation effect on materials, thermo-mechanical effect and mechanisms, and laser diagnostic technology.
- Laser Plasma Physics included papers on laser-plasma interaction, mechanism of laser plasma production, ultra-intense laser plasma, and laser plasma diagnostics.
- Laser Spectrum Technology and Applications discussed different laser-based combustion diagnostic technologies or laser spectrum measurement technologies, such as CARS, TDLAS, LIF, PLIF, HTV, and LIBS. Novel laser remote sensing technologies and new applications of laser spectroscopy were also included, such as super-resolution biological imaging methodologies.
- High Power Lasers featured research on gas lasers, solid state lasers, chemical lasers, fiber lasers, and other new high power laser.
- The Nonlinear Optics session showcased new developments and applications in nonlinear optics in materials ted such as THz sources and other frequency transformation.
- Laser Processing mainly focused on the study of laser processing of materials and new developments in laser processing devices. Studies in laser beam transformation and mirco-nano optics were also discussed.

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Guobin Feng