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Introduction

The Third International Symposium on Laser Interaction with Matter (LIMIS 2014) was successfully held on 2 November 2014 in the famous and historical city of Nanjing, People's Republic of China. Many internationally prestigious experts in related fields attended the symposium and presented their latest research and innovations. Nearly 220 presentations—including plenary and invited talks, oral talks and posters—were selected from more than 250 submissions from around the world, including China, Russia, the United Kingdom, the United States, France, Germany, Sweden, and Japan. Finally, 83 papers were accepted for publishing.

The symposium focused on the most-recent and advanced topics concerning laser-matter interactions, highlighting the latest advances in six contributed sessions, including laser irradiation effect and mechanism, laser-plasma physics, laser-spectrum technology and applications, high-power lasers, nonlinear optics, laser processing, and one special session: laser chemistry.

The symposium provided a platform for all of the participants to communicate with each other and share their views and ideas. Furthermore, every paper will benefit not only the participants but also researchers engaged in related fields.