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Introduction

Rapid development in terahertz science and technology recent years, is not only due to the fact that it has not been fully explored, but also due to its promising applications in spectroscopy, imaging, communications, and nondestructive testing and so on. The tremendous demand has dramatically accelerated the research and development on the smaller terahertz emitter with high-power, the uncooled terahertz detector with high sensitivity, the portable and robust devices and systems with high speed. We are glad to see this subject attracting an increasing amount of attention and interest. Joint effort made by academia and industry combined promotes terahertz science and technology development.

In this regard, the "Terahertz Technologies and Its Applications Conference" of OIT' 2015 was organized. The conference accepted over 17 papers from different countries/areas of the world, which are focused on the novel device, system and application of terahertz science and technology, and crossed many research disciplines including laser plasma, metamaterials, testing and calibration, and biomedical technology. We also invited renowned scholars to present their cutting-edge research, covering fundamental science such as terahertz generation with laser plasma and technological application advancements involving probing disaggregation of crude oil in a magnetic field. These experts and contributors together made a great feast of intellect.

As the committee chairs, we would like to express our appreciation to the committee members for their support, to the presenters for devoting their precious time to write the intriguing articles, and to the reviewers for their helpful comments. We are also grateful to the staff of SPIE for their efforts in publishing this Proceedings volume.

Cunlin Zhang Xi-Cheng Zhang

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