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# Introduction

We have had the great honor to organize the 4th International Symposium on Photoelectronic Detection and Imaging in Beijing; it follows ISPDI2009 held also in Beijing in 2009. More than 1000 participants attended ISPDI 2011. The symposium provided a forum for the participants to report and review ideas and up-to-date comprehensive progress and developments and to discuss the novel approaches to application areas in the field of photoelectronic detection and imaging.

There were 720 papers accepted for presentation at ISPDI 2011, contributed by over 1,200 authors from nearly 20 countries, including: United States, Canada, Russia, United Kingdom, Germany, Ireland, Belgium, Poland, Czech Republic, South Africa, Australia, Korea, Japan, India, Malaysia, Singapore, China, and so on. We have nearly 100 international famous scientists and experts as invited speakers. The invited papers covered topics such as sensor and micromachined optical device technologies, laser sensing and imaging, infrared imaging and applications, imaging detector and applications, terahertz wave technologies and applications, space exploration technologies and applications, and related technologies and applications. It is sincerely hoped that the research and development in photoelectronic detection and imaging will be promoted, and the international cooperation sharing the common interest will be enhanced.

I would like to heartily to thank our sponsors and cooperative organizations for all they have done for the symposium. Thanks also to all the authors for their contributions to these proceedings, to all of the participants and friends for their interest and efforts in helping to make the symposium possible, to the organizing committee and the program committee for their effective work an valuable advice, especially the ISPDI2011 Secretariat, and to the SPIE staff for their tireless effort and outstanding service in preparing and publishing the conference proceedings.

Again, we extend our warmest greetings to you and hope you have had a rewarding and exciting stay during ISPDI 2011.

Guofan Jin

# Local Cooperating Organizations of ISPDI 2011

Shanghai Institute of Optics and Fine Mechanics, CAS (China) Shanghai Institute of Technical Physics, CAS (China) Beijing Institute of Space Mechanics and Electricity (China) Beijing Huahang Radio Measurement and Research Institute (China) North China Research Institute of Electro-optics (China) Beijing University of Aeronautics and Astronautics (China) Nanjing University of Science and Technology (China) Beijing Institute of Technology (China) Beijing University of Technology (China) State Key Laboratory of Transducer Technology (China) Science and Technology on Micro-system Laboratory (China) The Key Laboratory of Microwave Remote Sensing, CAS (China) Science and Technology on Space System Simulation Laboratory, Beijing Simulation Center (China)