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Yuri N. Kulchin Roman V. Romashko Jyh-Chiang Jiang Editors

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## Introduction

The SPIE-supported 16th Asia-Pacific Conference on Fundamental Problems of Opto- and Microelectronics (APCOM 2017) was held in November 2017 in the heart of Pacific Asia – in the Taiwanese capital Taipei. Since 2000, the conference has been the venue for cutting-edge achievements in a variety of topics related to opto- and microelectronics. During the intervening years, the focus of the conference has shifted to fundamental and applied aspects of optics, photonics and nano-electronics and covers photonic communication, optical measuring systems, photonic sensors, as well as their application in life-sciences, bio-medicine, social welfare, industrial facilities, and structural health monitoring. The conference also covers novel materials and structures for optics and photonics, new principles, technologies and methods for optical information processing and imaging, as well as nano- and bio-photonics.

In the past, APCOM papers have been published as SPIE Proceedings (volumes 4513, 4357, 5129, 5851, 6595, and 10176); and now, with the publication of this SPIE volume, we are glad to have continued the long-established tradition.

Yuri N. Kulchin