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**Vadim P. Veiko
Tigran A. Vartanyan**
Editors

**24–28 June 2013
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Introduction

This volume presents selected papers of the International Symposium on Fundamentals of Laser-Assisted Micro- and Nanotechnologies (FLAMN-13).

This symposium continues in a new format from well-known traditional symposia, ILATA (Intensive Laser Actions and Technological Applications), consisting of LAMN (Laser-Assisted Microtechnologies) and LMI (Laser-Matter Interaction) conferences, originally organized in former Leningrad, USSR since the mid-1960s. Laser-assisted micro- and nanotechnology is one of the first and rapidly growing areas of research, development, and production.

The symposium was devoted to the wide spectrum of laser micro- and nanoprocessing, from physical fundamentals of different processes and their experimental demonstration, to the industrial set-ups and their realization. Topics covered by FLAMN-13 included theoretical and experimental aspects of laser-matter interaction applied to laser micro- and nanotechnology.

The sessions of FLAMN-13 were visited by over 350 participants including 200 speakers, approximately 80 of them from abroad (Australia, Austria, Belarus, China, France, Germany, Mexico, Hungary, Italy, Japan, Korea, Lithuania, Romania, Spain, Switzerland, United Kingdom, United States). About 225 papers were presented (110 orals, 115 posters); this volume contains 44 selected papers.

For convenience of readers, the papers in these proceedings are arranged into six topical sections:

- Section 1: Laser-matter interaction
- Section 2: Laser-assisted micro- and nanotechnologies
- Section 3: Laser-induced phase – structure modification
- Section 4: Laser cleaning and artworks conservation
- Section 5: Biomedical laser applications
- Section 6: Lasers and optics related research.

The program committee expresses its gratitude to all the institutions and persons who contributed to organizing, supporting, and holding the conference.

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