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# *Advanced Topics in Optoelectronics, Microelectronics, and Nanotechnologies IX*

**Marian Vladescu**
**Razvan Tamas**
**Ionica Cristea**
*Editors*

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# Introduction

The ninth edition of the International Conference on Advanced Topics in Optoelectronics, Microelectronics, and Nanotechnologies (ATOM-N 2018), was hosted for the fifth time in Constanta, Romania, one of the most important academic, cultural, and industrial centers in Romania, located in the historical region of Dobrogea, on the Black Sea (Pontus Euxinus) seaside.

The present edition marks 18 years of ATOM-N conference existence, in which it has consistently gathered the youthful spirit and the experience of the most appreciated scientists in the field of micro/nano technology and photonics/optoelectronics: topics that have, nowadays, great scientific applications worldwide.

ATOM-N 2018 took place 23–26 August 2018, and was organized into eight main sessions: the Plenary Session; Advanced Materials and New Technologies; Diffractive, Micro-Optics, and Optical Signal Processing; Sensors, Microsystems, and Instruments; Modeling, Design and Simulation; Micro/Nanophotonics and Micro/Nanotechnologies; Optics-inspired Approaches for Non-optical Applications; Systems, Devices, and Signal Processing; and Medical Optoelectronics.

This was for the fifth time in the conference history when student contributions have been evaluated, and three prizes awarded.

We received abstracts from scientists all over Europe and the United States, from over six countries total. Due to the efforts of the Scientific and Program Committees, 158 abstracts were accepted for presentation and 155 presented, from which 142 have been selected for publishing in the conference proceedings as follows: 5 plenary lectures, 1 invited lecture, 39 oral lectures, and 110 poster papers.

We would like to express our thanks to the Organizing Committee for their enthusiastic and efficient work, and we extend our warmest thanks to all of the authors who presented their scientific contributions.

We hope that all of the participants of this prestigious meeting have had both an interesting professional experience, as well as moments of relaxation, while discovering the multicultural aspects of the academic city of Constanta, Romania.

**Marian Vladescu**
**Razvan Tamas**
**Ionica Cristea**