

Proceedings of the
44th International School and Conference
on the Physics of Semiconductors "Jaszowiec 2015"

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Preface

The present issue of *Acta Physica Polonica A* contains 1 invited paper and 39 contributed papers presented at the 44th International School and Conference on the Physics of Semiconductors (IS&CPS) “Jaszowiec 2015”, which took place in Wisła, Poland, between June 20th and 25th, 2015. This meeting of the Polish and international semiconductor community has been organized annually since 1970 by several Polish scientific institutions.

The IS&CPS “Jaszowiec 2015” was organized by the Institute of Physics of the Polish Academy of Sciences, the Institute of High Pressure Physics of the Polish Academy of Sciences, the Faculty of Physics of the University of Warsaw (the Institute of Experimental Physics and the Institute of Theoretical Physics), the Departments of Experimental and Theoretical Physics of the Wrocław University of Technology, the Institute of Electron Technology, the Committee on Physics of the Polish Academy of Sciences, and Foundation Pro Physica.

Every year, the conference brings together prominent experts working both in Poland and in foreign research centers (representing 16 countries at Jaszowiec 2015) and provides an important contribution to the development of semiconductor physics. In the last years, the number of participants of the School and Conference has numbered over 260. In 2015, a two-day Special Tutorial Session preceded the Conference from June 20th to 21st. The School consisted of 6 lectures followed by discussions that provided an introductory overview of the main conference topics. During the following 4 days of the Conference, 22 one-hour long invited talks were given and about 220 contributed papers were presented as 15-minute talks or posters. The subjects covered during the invited talks included, but not limited to: spintronics and spin physics in semiconductors, semiconductor nanostructures, graphene and carbon nanostructures, quantum optics and nanophotonics, topological insulators, magnetic and electrical phenomena in semiconductors, quantum information, and synthesis and characterization of semiconductor materials.

We wish to express our gratitude to the members of the Program Committee and the International Advisory Committee for their significant contribution to the success of the School and the Conference. We would also like to thank all colleagues who helped to organize the School and the Tutorial Session. We address special acknowledgments to Łukasz Kłopotowski, Chairman of the Tutorial Session, as well as to the members of the Organizing Committee: Martyna Cinak-Modzelewska and Maciej Zajączkowski.

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