

Proceedings of the
42nd International School and Conference
on the Physics of Semiconductors "Jaszowiec 2013"

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Preface

This issue of *Acta Physica Polonica A* contains 42 contributed papers presented during the 42nd International School and Conference on the Physics of Semiconductors “Jaszowiec 2013”, which took place in Wisła on June 22nd-27th, 2013. The meeting was organized by Institute of Physics, Polish Academy of Sciences, Institute of Experimental Physics and Institute of Theoretical Physics at the Faculty of Physics, University of Warsaw, Institute of High Pressure Physics, Polish Academy of Sciences, Wrocław University of Technology, Institute of Electron Technology, and Committee on Physics, Polish Academy of Sciences.

The Conference was attended by 252 participants from 18 countries (Australia, Brasilia, Canada, France, Germany, Iran, Israel, Italy, Japan, Lithuania, the Netherlands, Poland, Russia, Spain, Sweden, Ukraine, United Kingdom, and USA). The scientific program consisted of 21 invited lectures and 215 contributed papers (21 oral presentations and 194 posters). The scope of the Conference covered a broad range of topics related to semiconductor physics, including technology, experiment, theory and modeling. Special accents were put on: topological crystalline insulators, Majorana fermions, graphene, semiconductor nanostructures, spintronics, properties of wide band gap semiconductors, and advanced techniques of semiconductor imaging and processing. The Conference was preceded by a two-day day tutorial session, the School, addressed mainly to young scientists. This event was attended by 135 participants. In a series of four lectures given by outstanding scientists the School provided introduction to topological insulators and topological crystalline insulators, plasmonics and nanophotonics, spintronics, and ZnO based devices.

We would like to thank the members of the Program and Advisory Committees who took the responsibility for the whole scientific program of the School and Conference and express our gratitude to the members of the Organizing Committee, Marta Galicka, Bartłomiej Witkowski and Monika Budny, for their excellent work.

Finally, we would like to acknowledge financial support from Ministry of Science and Higher Education, Polish Academy of Sciences, Kronenberg Foundation Citi-Handlowy, U.S. Army Forward Element Command-Atlantic, from the European Regional Development Fund (Projects: Nanobiom, MIME and IntechFun), and from commercial sponsors: PANalytical and Labis – Oxford Instruments.

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