

Proceedings of the 49th  
International School and Conference  
on the Physics of Semiconductors  
“Jaszowiec 2021”

June 1–10, 2021  
Online Conference

*Editors of the proceedings:*

Henryk Turski  
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# Preface

The Special Issue of *Acta Physica Polonica A* contains 9 contributed papers presented during the 49th International School and Conference on the Physics of Semiconductors “Jaszowiec 2021”, which took place online on 1–10 September, 2021.

The meeting was organized by:

- Institute of Physics of the Polish Academy of Sciences,
- Faculty of Physics, Institutes of Experimental and Theoretical Physics, University of Warsaw,
- Faculty of Fundamental Problems of Technology, Wrocław University of Science and Technology,
- Institute of High Pressure Physics of the Polish Academy of Sciences,
- Łukasiewicz Research Network — Institute of Microelectronics and Photonics,
- Committee on Physics, Polish Academy of Sciences,
- Polish Academy of Sciences.

The Conference was attended by 246 participants from 16 countries (Canada, Czech Republic, Finland, Germany, India, Iraq, Japan, Lithuania, Netherlands, Pakistan, Poland, Portugal, Russia, Switzerland, Ukraine, and the United States of America). The scientific program consisted of 20 invited lectures and 178 contributed papers (43 oral presentations and 135 posters). The scope of the Conference covered a wide range of topics related to semiconductor physics, including experiment, theory, modeling, and technology. Particular emphasis was placed on layered semiconductor systems, topological matter, nitride semiconductors, polariton condensate and photonics. The Conference was preceded by the School, i.e., 5 tutorial lectures given by outstanding scientists, addressed mainly to graduate students and young scientists. These lectures provided a comprehensive introduction to hot topics relevant to modern semiconductor physics.

We would like to thank the members of the Program and Advisory Committees who have taken responsibility for the entire scientific program of the School and the Conference, and we express our gratitude to members of the Organizing Committee for their excellent work. Finally, we would like to acknowledge financial support from the Polish Academy of Sciences and U.S. Army International Technology Center-Atlantic as well as commercial sponsors: Dr. Eberl MBE-Komponenten GmbH, EDVAC Sp. z o.o., LABSOFT Sp. z o.o., and nextnano GmbH.

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