



Proceedings of the 11th Quantum Structure Infrared Photodetectors (QSIP) International Conference 2020/2022

Editorial Preface

This special issue of Opto-Electronics Review (OPELRE), journal of the Polish Academy of Sciences (PAS) and the Association of Polish Electrical Engineers (SEP), is brought to you following the 11th Quantum Structure Infrared Photodetector (QSIP) 2020/2022 International Conference held in July 2022 in Kraków, Poland. The 11th QSIP 2020/2022 conference was organized by Military University of Technology (MUT) and Photonics Society of Poland (PSP) and hosted scientists and researchers from five continents who delivered 46 oral presentations in 8 sessions, including 2 plenary and 2 invited talks. Although only some of the presentations are presented in this special issue as peer-review papers, they still cover very well the main topics presented at the conference in various sessions such as infrared detectors – current status and development, infrared materials – bulk and T2SLs, growth, carrier transport, fabrication, focal planes, and infrared instruments for remote sensing applications.

For the very first time in the history of QSIP, the young scientist's contribution was awarded: **Clara Bataillon et al.** "Superlattice-based infrared photodetectors under proton irradiation" from University of Montpellier, France – Congratulations!!!

A total of 24 full-length papers based on the presentations were included in this proceedings volume. Considering the high quality of the presentations, the wide range of topics covered, and many stimulating discussions involving

technical issues and applications during the panel session, the QSIP 2020/2022 International Conference should be considered as a huge success. Without a doubt the QSIP 2020/2022 can be regarded as one of the key conference fixtures in optoelectronics and photonics presenting the latest challenges and developments in the quantum structures for infrared detectors. That keeps underscoring the continuous need for the future exchange and collaboration in the field of quantum structures infrared photodetectors.

We would like to kindly thank all the talented researchers who travelled from all over the world to make this conference great. In addition, QSIP 2020/2022 would not be possible without the financial support by Jet Propulsion Laboratory, IQE Infrared, Polish Academy of Sciences, i3 System, VIGO PHOTONICS, Inframet, Set, Teledyne FLIR and SCD – Thank you – that builds the QSIP brand!!!

We extend our gratitude to the conference committees for their efforts, session chairs for the exciting technical program, and finally the reviewers contributing to the conference proceedings.

The next QSIP will be held in 2024 in the USA, and we hope to see this community growing and developing.

Sincerely,

Conference Chairs:

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