

May 31, 2023

Session IV

ELECTRONICS AND PHOTONICS

Committee: **prof. Ing. Ivan Hotový, DrSc. – chairperson**
prof. Ing. Ľubica Stuchlíková, PhD.
doc. Ing. Miroslav Hagara, PhD.
doc. Ing. Miroslav Mikolášek, PhD.
doc. Ing. Erik Vavrinský, PhD.

09:00 - 11:00

- 1. State of health estimation of lithium-ion batteries based on incremental capacity and pulse analysis**
Matej Novák
- 2. Advanced PPG multisensor used in polysomnographic examinations**
Diana Viťazková, Tomáš Závodník, Krisztian Gašparek, Helena Kosnáčová, Erik Vavrinský, Michal Mičjan, Ivan Kocan and Peter Banovcin
- 3. EOG headband for monitoring human health**
Helena Kosnáčová, Diana Viťazková, Tomáš Závodník, Patrik Bartoš, Martin Kasznár and Erik Vavrinský
- 4. Experimental study of thin NiO thin-films for a high-performance hydrogen gas sensor**
Mohammad Sharif Shazileh, Ivan Hotový and Vlastimil Reháček
- 5. Inkjet Printed Boron-doped Diamond Layers for Electrochemical Analysis**
Michal Pifko, Marián Marton and Marian Vojs
- 6. Electrical characterisation of progressive structures based on GaN**
Matej Matuš and Ľubica Stuchlíková
- 7. Analysis of switching boundaries of the fully integrated DC-DC boost converter**
Róbert Ondica and Viera Stopjaková

13:00

Announcement of award-winning papers (lecture hall BC-150)