Prof. Emil List-Kratochvil

Faculty of Mathematics and Natural Sciences
Department of Physics
Experimental Physics



Expertise

Prof. List-Kratochvil and his research group are working on electronic and optoelectronic hybrid components (based on hybrid material systems and organic or hybrid semiconductors), additive resource-efficient deposition techniques (inkjet printing) and in-situ nanostructuring and synthesis methods. By developing and combining novel electro-active materials with appropriate structuring and processing methods applications in the field of sensor technology, photovoltaics and optoelectronics are developed. Based on a wealth of experience, the AG Hybrid Devices can participate in national research projects, within the framework of European funding projects and programs or in direct contract research on the level from from basic research to joint product development.

Scientific Services

- Infrastructure for the fabrication and characterization of thin film hybrid semiconductor devices (LEDs, Hybrid PV, Hybrid transistors, sensor devices)
- Inkjet printing method for structured additive deposition of electronic and photonic functional materials
- Electrical, optical and spectroscopic methods for the characterization of electronic and photonic functional materials

Testimonials

- Infineon Technologies Austria AG - Villach, Austria: joint development of inkjet based processes in semiconductor manufacturing and RFID-antenna technologies
- Durst Phototechnik Digital Technology GmbH - Lienz, Austria: joint development of inkjet based processes for printing on glass, consulting on the construction and ramp-up of a central corporate R&D-facility, training of employees
- Austria Technologie & Systemtechnik Aktiengesellschaft – Leoben, Austria: joint development of inkjet based processes for printing components on printed circuit boards
- ISOVOLTAIC AG – Lebring, Austria: joint development of hybrid PV Technologies
- Sappi Europe, Austria: joint development of coating technologies and electronic functionalities in and on paper

Topics / Trends

Coatings / Surfaces
Hybrid Systems
Internet of Things
Human-Technology-Interaction
Optics

Scientific Institution

Helmholtz Zentrum Berlin
IRIS Adlershof

Industries

Energy, Utilities & Raw Materials
Machinery & Plant Engineering

Humboldt-Innovation GmbH
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