Research Highlights *on a nutshell* (2013-2017)

World-class advances in electronic technologies for smart devices, including:

- Energy-efficient sensor-to-digital interfaces in deep nanoscale CMOS technology

- Photodetector devices and transducers in a-SiC:H & related materials

Advances in sensor networks and signal processing, namely:

- Tools for analysis of time-series of microscopy images with automatic cell segmentation

- New methods for Fractional Signal Processing

- Target Localization and Tracking in Wireless Sensor Networks (WSN)

Support for systems design and integration, including:

- Petri Nets based framework for CPS design

- Reconfigurability of legacy systems

- Enterprise Systems Interoperability and Sustainability

Contributions to computational intelligence, including:

- Self-healing systems based on Artificial Immune Systems

- Intelligent dynamic and adaptable multi-criteria decision model for information fusion

- Advanced Control in Human-Machine Interaction Systems

World-class contributions to collaborative networks, including:

- Novel models and mechanisms for collaborative networks (CN) and collaborative business services creation

- Progress on understanding and modeling behavioral aspects towards collaboration sustainability in business ecosystems

- Concept of cooperative Net-Zero Community Building