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Smart Sensors, Actuators, and MEMS VIII

Luis Fonseca
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Introduction

The SPIE Sensors, Actuators, and MEMS VIII conference took place in Barcelona within the 2017 edition of the SPIE Microtechnologies event.

It gave coverage to a wide breadth of topics with quite a few interlinks among them. Sessions on materials and processing, modeling and simulation, chemical and biochemical sensors, physical sensors, energy devices, and interfacing and systems issues followed for three intense days covering the full food chain of microdevices. Remarkably enough, most of the talks were given by young researchers.

In terms of microtechnologies, silicon technologies, printing technologies, and hybrid technologies were considered making use of both silicon and non-silicon materials. In terms of applications, the devices considered were thought to contribute to increasing environmental smartness, and to nurturing wearables or IoT nodes.

This conference program suited well the overall goal of the SPIE Microtechnologies event, completing the scope of other concurrent conferences: it went a step further into devices than the Nanotechnology VIII conference and complemented the type of devices envisioned in the Bio-MEMS and Medical Microdevices III conference.

Moreover, the Sensors, Actuators, and MEMS VIII program also complemented very well with the SPIE Microtechnologies plenary talks, which dealt with graphene technologies as an enabling material for bioelectronics, MEMS microphone innovations which is an outstanding market success of a silicon microdevice, and the energy efficiency challenge of smart microsystems which illustrated the system-wise energy challenges of making sensor nodes deployable in IoT scenarios in an effective and sustainable way.

Extended abstracts of most of the presented works at Sensors, Actuators and MEMS VIII have found their way into this SPIE proceedings volume, which are now available for further consultation.

Luis Fonseca
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