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Announcement Smart Systems Integration 2023 and Award Winners of the Smart Systems Integration Conference SSI2022 in Grenoble

The annual Smart Systems Integration Conference and Exhibition will be held in Bruges, Belgium, from March 28 until 30, 2023. The conference systematically addresses all system integration aspects. This includes integration of different functionalities, heterointegration, packaging, software integration including firmware as well as reliability, and safety aspects. The SSI connects science, industry, and politics. It is the platform for networking of the different experts on the one hand from the hardware and software area, on the other hand from the different levels of the products, from system-on-chip over system-in-a-package up to system-of-systems for different application domains.

At the same time the apc|m conference takes place in the Bruges conference center. Both conferences have their own profile, but the common venue gives participants the opportunity to exchange ideas on topics of mutual interest and to cross-fertilize.

Award Winners of the SSI2022

Already since 2007 it is tradition at the International Smart Systems Integration Conference to award a Best Paper and a Best Poster Award with an endowment of 500 € each. Both prizes are sponsored by EPoSS – the European Platform for Smart Systems Integration – and Fraunhofer ENAS. In addition, the third prize is the Thomas Gessner Award, which was awarded for the third time in 2022.

While the best poster will be selected by all participants of the conference and already announced at the end of the conference, the Best Paper Award winner will be nominated by the committee. The award winner will be selected from 7 to 10 candidates based on his presentation and paper and will be announced a few weeks after the conference. The award will be presented to the awardee at the Smart Systems Integration Conference 2023.

IN COOPERATION WITH**smartsystems
integration**

Editors

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Best Paper Award

The Best Paper Award of the SSI2022 held in Grenoble on 27 and 28 April 2022, goes to Moritz Schlagmann from Infineon Technologies for his paper “Miniaturized and Highly Integrated Humidity Sensor with Biocompatible Sensing Material for Smart Farming”. Moritz Schlagmann, works at Infineon Technologies in Neubiberg, Germany. The uniqueness of this leaf moisture sensor, developed within the European project “PLANtAR”, lies in the combination of miniaturized design (1 mm x 1 mm), an integrated ASIC for electronic readout, biocompatibility, chemical resistance, temperature independence, moderate hysteresis, as well as long-term measurement stability – and is therefore very useful for smart farming in the context of integrated crop protection. The publication reports on the development, manufacture and testing of the sensor, as well as a comparison with other available moisture sensors. The sensor’s field of application is not limited to leaves, but wherever moisture needs to be measured and analyzed in situ; a change of housing material makes it suitable for other applications.

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Moritz Schlagmann wins the Best Paper Award of the SSI2022 held in Grenoble on April 27 and 28, 2022.
Photo @ Infineon

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Thomas Gessner Award

Already at SSI2022 in Grenoble, the Thomas Gessner Award for an outstanding scientific PhD thesis was presented for the third time but for the first time to a scientist of TU Chemnitz. The scientist Dr. Apoorva Sharma, staff member of the Chair of Semiconductor Physics headed by Prof. Dr. D. R. T. Zahn, received the Thomas Gessner Award in Grenoble for his dissertation “Correlation Between the Structural, Optical, and Magnetic Properties of CoFeB and CoFeB Based Magnetic Tunnel Junctions Upon Laser or Oven Annealing”.

The dissertation was carried out as part of a joint project of the Chemnitz University of Technology, the Fraunhofer Institute for Electronic Nano Systems, and the Laser Institute at Mittweida University of Applied Sciences with financial support from the German Research Foundation (project number 28219353). It provides the first proof of concept that laser annealing can be used as an efficient, fast, and reliable direct-write technique for magnetic multilayer systems.

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Dr. Apoorva Sharma, received the Thomas Gessner Award in Grenoble for his dissertation „Correlation Between the Structural, Optical, and Magnetic Properties of CoFeB and CoFeB Based Magnetic Tunnel Junctions Upon Laser or Oven Annealing“.

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The Thomas Gessner Award is sponsored by Fraunhofer ENAS since 2019. It bears the name of the first director and founder of the Fraunhofer Institute for Electronic Nano Systems ENAS Prof. Dr. Thomas Gessner.

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The award is addressed to national and international master students and PhD students in the field of Smart Systems Integration, whose final thesis has been evaluated with at least “very good” and does not date back more than two years.

The award committee reviews:

- the novelty of the scientific-methodical approach,
- the progress of knowledge,
- the translation of the scientific results into application and proof of commercial success,
- the internationality.

Further information to the Thomas Gessner Award winner 2022 and his topic you will find here: www.enas.fraunhofer.de/content/dam/enas/Dokumente/English/News_and_Events/PressReleases/pi_2022/2022-07-21_ThomasGessnerAward_FraunhoferENAS_EN.pdf