



## Editorial

# “Not just another new journal of sensors”

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This article you are reading is the very first contribution to a new scientific journal focusing on sensors and sensor systems. To acquaint you with JSSS – the “Journal of Sensors and Sensor Systems” – I will try to describe what makes JSSS unique and what the reasons are why JSSS might be the first choice to publish your results.

Sensor and measurement technology have attained crucial economic significance in practically all areas affecting people’s lives – from industry via medicine to private life. Process control, automotive, convenience, safety, smartphones and tablets as well as home appliances and other electronic gadgets are just a few examples where sensor technology is penetrating our modern world more and more. AMA – the German Association for Sensor Technology (www.ama-sensorik.de) – has been monitoring the German and global sensor markets for more than three decades. The curves show an average annual increase of some 8 %, outperforming many other branches of industry. The trend continues: Even the economic slump in 2008 led to just a temporary drop in turnover, which was fully compensated in the following two years. As AMA points out, the estimated global market potential amounts to 70 to 120 billion US Dollars. The 800 German manufacturers of industrial measuring devices and systems alone show an annual turnover of some 20 billion Euros. These numbers give evidence of the dynamics of sensor technology in research and development and justify the importance of knowledge transfer between researchers from academia and industry as well as practitioners to share ideas, problems and solutions relating to the multifaceted aspects of developing and applying sensors and sensor systems. JSSS provides the crucial platform for scientists and academicians as well as for developers, engineers and users to discuss new developments and advancements.

What we scientists and engineers need is our research to be published, to be read by others, and – as an evidence for that – to be cited. The latter, in particular, is an ever-growing imperative in academia. JSSS is an open access journal, available

online and free of cost to readers. It does not require any obligation for subscription from libraries or individuals whatsoever. Thus, all articles published in the JSSS can be fully accessed – and hence read and cited – anytime from anywhere. This means articles are not just read by colleagues from academia having access to the subscription of their university’s library. All rights for further publication of the material published in JSSS remain in the hands of the authors. This facilitates the further usage of authors’ own figures, tables and other material for different purposes like review articles, books and teaching material.

Nevertheless, publication is not free of costs. Costs for production, language polishing and archiving have to be covered in some way. Open access means that the service charge per article is paid not by the reader but by the authors. The AMA Association for Sensor Technology – the non-profit German sensor association – ensures that the service charge does not include and will never include any profit. Quite the contrary, AMA supports the JSSS by bearing all costs in the Journal’s first two years and half of the costs in its third year to enable the Journal a successful start and its potential authors in particular until JSSS becomes a well-established scientific journal indexed in all relevant aggregators like Thomson Reuters’ ISI Web of Knowledge and Elsevier’s Scopus.

### Open Access provides knowledge-disseminating benefits

- **For authors:** increased visibility and hence citation advantage.
- **For readers:** unlimited access free of charge.
- **For academia:** accelerated knowledge exchange without access limitations.
- **For society:** enables the public to become acquainted with the advance of science and technology.

JSSS is a fully refereed scientific journal with the standard minimum of two peer reviewers per article. Submission of manuscripts as well as the review process are fully supported by electronic platforms to minimize the workload of authors, editors and reviewers and to speed up the time between submission and publication. And, to maximize quality, the publisher’s production process is handled in-house rather than outsourced. In contrast to regular print journals, these electronically managed and delivered processes make it possible to minimize the publication time and bring the scientific results to the readers as fast as possible.

The journal subject areas are defined by the following index terms below. These terms represent the keywords to be chosen for assignment of submitted manuscripts to individual editors.

### Sensor principles and phenomena

- Mechanical and inertial sensors;
- Thermal sensors;
- Optical and infrared sensors;
- Magnetic sensors;
- Chemical and biochemical sensors.

### Measurement systems

- Sensor signal processing and electronics;
- Sensor-actuator systems;
- Multi-sensor systems;
- Sensor networks.

### Measurement theory, uncertainty and modeling of measurements

- Measurement uncertainty;
- Measurement theory and science.

### Sensor technologies

- Sensor materials;
- Modeling and simulation;
- MEMS technology;
- Packaging;
- Characterization and test.

### Applications

- Process control;
- Automation;
- Smart home;
- Robotics;
- Production measurement technology;
- Automotive and mobility;
- Medical;
- Environmental monitoring;
- Safety and security;
- Energy (generation, transport, distribution, storage, consumption);
- Biotechnology.

### JSSS manuscript types

The following types of manuscripts are considered for peer-reviewed publication in the Journal of Sensors and Sensor Systems (JSSS):

- **Regular Research Articles** report original scientific work.
- **Short Communications** report original scientific work that is of an urgent nature. The length is limited to 2 journal pages.
- **Review Papers** review recent progress in a particular topic by synthesis of primary sources, mainly research papers presented in academic journals.
- **Feature Articles** transfer comprehensive knowledge in areas of special excitement and progress.

### Why choose JSSS?

- **It is fast:** Manuscripts are published online within just a few weeks after submission – immediately after acceptance.
- **It is accessible:** All articles in the JSSS can be accessed online everywhere by everybody, free of charge to the reader.
- **It is service-oriented:** Author’s have personal contact throughout the entire in-house publishing process.
- **It is non-profit:** JSSS is published by Copernicus Publications on behalf of the AMA Association for Sensor Technology – the non-profit German sensor association.

- **It is high-level:** Internationally renowned Associated Editors maintain the high scientific quality of the JSSS. Plagiarism check and other measures ensure that only original work will be published. These stringent measures will help to get JSSS indexed in Thomson Reuters’ ISI Web of Knowledge, Elsevier’s Scopus and many other aggregators as soon as possible.
- **It is both academic and application-oriented:** Sensor and measurement technology is more than academic writing. It needs the knowledge of sensor materials, their fabrication and construction but also the evaluation of their reliability and endurance in practical applications.

JSSS provides you a chance to make a contribution to the field of sensors, sensor systems and measurement technology. On behalf of the Editorial Board I am looking forward to working with you.

**Gerald Gerlach**  
**Chief Editor of JSSS**