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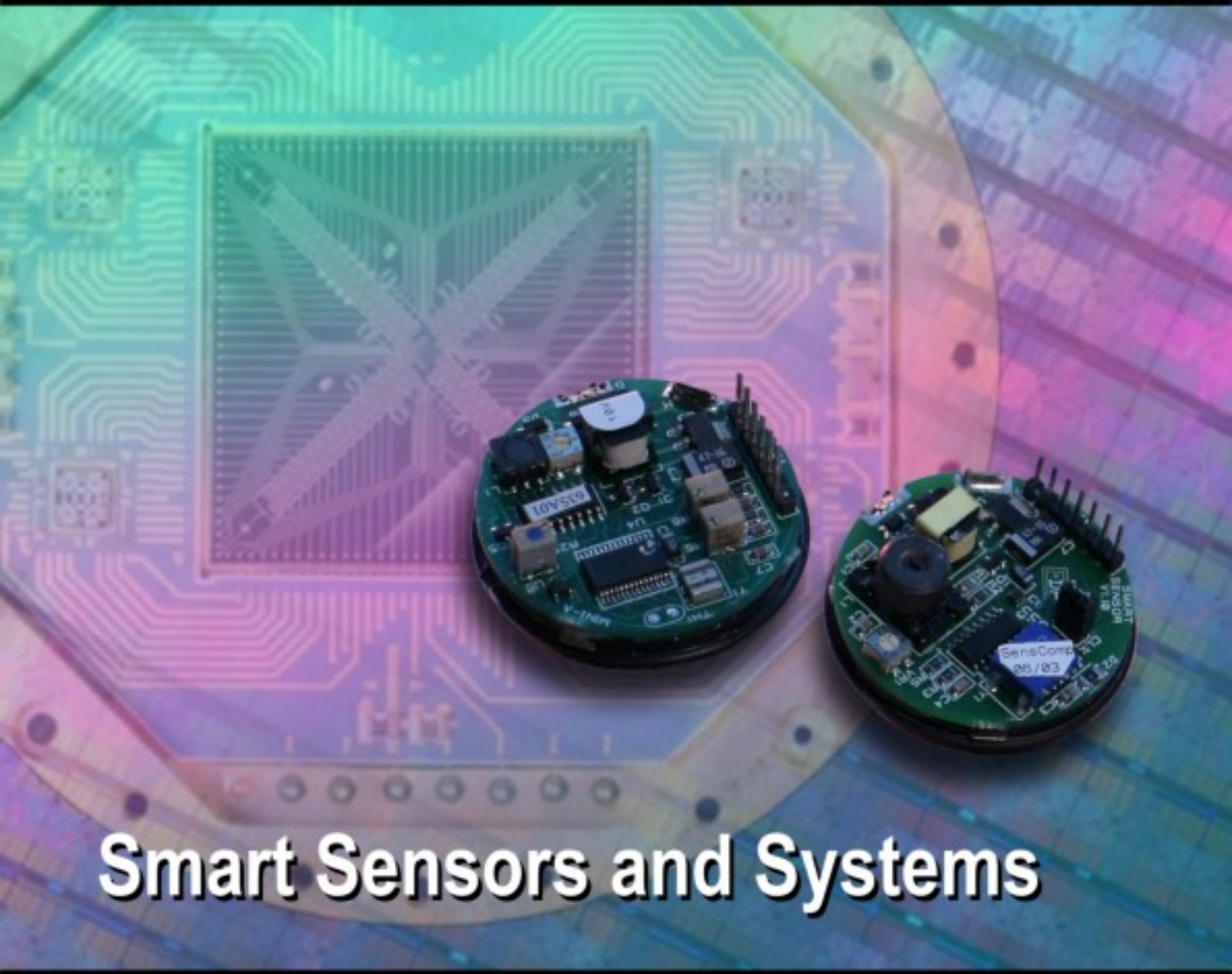

Smart Sensors and Systems

International Frequency Sensor Association Publishing

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Smart Sensor Systems: Book Review

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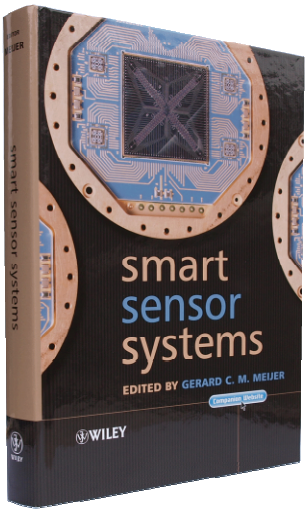

Published by John Wiley and Sons, *Smart Sensor Systems (edited by Gerard C.M. Meijer)* is intended as a reference for designers and users of various smart sensors and sensor systems. This book is based on material presented in the annual EuroTraining Quality Labelled Approved engineering multidisciplinary course of the same name that is given at Delft University of Technology since 1995.

Smart sensors and sensor systems are being used widely in industries, including automotive, medical, industrial, entertainment, security, and defence due to increased usage of process controls and sensing elements in different sectors. According to analytics from the *Global Industry Analysts Inc.*, Europe represents the largest and fastest growing smart sensors market and is projected to reach US$2.1 billion by 2010, while the global smart sensors market will reach US$7.8 billion by 2015. The past few decades have witnessed an explosive growth in sensors and sensor-based applications, which has led to a greater demand for sensor interfacing integrated circuits. Strong growth expected for sensors based on MEMS-technologies, intelligent sensors and sensors with bus capabilities.

Writing by really stellar internationally-recognized team of experts as Johan H. Huijsing, Gerard C.M. Meijer, Paddy J. French, Reinound F. Wolffenbuttel, Michael J. Vellekoop, Radivoje S. Popović, Sergey Y. Yurish and others, the new published book *Smart Sensor Systems* provides the reader with a deep understanding of the basic principles and concepts of advanced sensor systems starting from main definitions of sensors, smart sensors and integrated smart sensors to handling them all information necessary to develop smart sensor systems (including self-adaptive sensor systems), interface electronics and powerful measurement techniques for such systems. The book provides excellent information about many types of silicon sensors, optical sensors, physical chemosensors, thermal sensors, temperature sensors, capacitive sensors, Hall magnetic sensors as well as universal sensor interfaces, data acquisition for frequency- and time domain sensors, microcontrollers, digital signal processors, A-D converters and universal frequency-to-digital converters for smart sensor systems.

Each of twelve well-illustrated chapters is followed by dozens carefully selected useful references as books, papers, articles, reviews and online reliable Internet sources. Undoubtedly, that the book is useful as a source of references. There are also numerous case studies and problems set at the end of each chapter to test and develop obtained knowledge. Solutions for all problems can be found at the book's web site: www.wiley.com/go/meijer_smart

Who should read this book ? *Smart Sensor Systems* will greatly benefit undergraduate and postgraduate students and professors in the any sensors and measurements related areas. Engineers and researchers in the microelectronics industry, including microsystem developers, will also find this a thorough and useful volume. For beginners it is a good introduction to the world of smart sensors. For advanced readers it is a good and extensive handbook with application examples and help. *Smart Sensor Systems* is one of the titles that everybody, who are working or going to be involved into the modern sensors design, must have on their book shelves.

For online order please visit the following web page:
http://www.sensorsportal.com/HTML/BOOKSTORE/Smart_Sensor_Systems.htm

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Guide for Contributors

Aims and Scope

Sensors & Transducers Journal (ISSN 1726-5479) provides an advanced forum for the science and technology of physical, chemical sensors and biosensors. It publishes state-of-the-art reviews, regular research and application specific papers, short notes, letters to Editor and sensors related books reviews as well as academic, practical and commercial information of interest to its readership. Because it is an open access, peer review international journal, papers rapidly published in *Sensors & Transducers Journal* will receive a very high publicity. The journal is published monthly as twelve issues per annual by International Frequency Association (IFSA). In additional, some special sponsored and conference issues published annually.

Topics Covered

Contributions are invited on all aspects of research, development and application of the science and technology of sensors, transducers and sensor instrumentations. Topics include, but are not restricted to:

- Physical, chemical and biosensors;
- Digital, frequency, period, duty-cycle, time interval, PWM, pulse number output sensors and transducers;
- Theory, principles, effects, design, standardization and modeling;
- Smart sensors and systems;
- Sensor instrumentation;
- Virtual instruments;
- Sensors interfaces, buses and networks;
- Signal processing;
- Frequency (period, duty-cycle)-to-digital converters, ADC;
- Technologies and materials;
- Nanosensors;
- Microsystems;
- Applications.

Submission of papers

Articles should be written in English. Authors are invited to submit by e-mail editor@sensorsportal.com 6-14 pages article (including abstract, illustrations (color or grayscale), photos and references) in both: MS Word (doc) and Acrobat (pdf) formats. Detailed preparation instructions, paper example and template of manuscript are available from the journal's webpage: http://www.sensorsportal.com/HTML/DIGEST/Submition.htm Authors must follow the instructions strictly when submitting their manuscripts.

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