

Journal of Sensor Technology



www.scirp.org/journal/jst

Journal Editorial Board

ISSN: 2161-122X (Print), ISSN: 2161-1238 (Online)

http://www.scirp.org/journal/jst

Editor in Chief

Prof. Ashok Srvastava Louisiana State University, USA

Editorial Board

Prof. Jian Zhu

Dr. Bruno AndòThe University of Catania, ItalyProf. Aytunç AtesAtatürk Üniversity, TurkeyDr. Nada Farouk AttaUniversity of Cairo, Egypt

Prof. Mohamad M. Ayad Egypt-Japan University of Science and Technology, Egypt

Prof. Saad Belkhiat

Dr. Rajmohan Bhandari

Dr. Paolo Bondavalli

Prof. İsmail Hakkl Boyaci

Sétif University, Algeria

Blackrock Microsystems, USA

Nanomaterials Group, Italy

Hacettepe University, Turkey

Dr. Antonio M. Calabro Italian Aerospace Research Center, Italy

Prof. Luc ChassagneUniversity of Versailles, FranceDr. Zheng ChenUniversity of Virginia, USADr. Annalisa ConvertinoIMM Laboratory, Italy

Dr. Asok. Kr. Dikshit Central Glass and Ceramic Research Institute, India

Prof. Vinod Kumar GuptaIndian Institute of Technology, IndiaProf. Chang-Sik HaPusan National University, South KoreaDr. Gong HaoNational University of Singapore, Singapore

Prof. Kamaruzaman Jusoff Universiti Putra Malaysia, Malaysia

Dr. Rohan D. KekatpureApplied Photonic Microsystems at Sandia National Laboratories, USA **Dr. Dae-Sik Lee**Electronics and Telecommunications Research Institute, South Korea

Dr. Weihua LiUniversity of Wollongong, AustriaProf. Xinxin LiChinese Academy of Sciences, China

Dr. Qingjun Liu Zhejiang University, China

Prof. Xiaobing Luo Huazhong University of Science and Technology, China

Dr. Shahabuddin MemonUniversity of Sindh, PakistanDr. Graça M. H. MinasUniversity of Minho, PortugalDr. Sandeep NegiUniversity of Utah, USA

Prof. Yiqing Ni The Hong Kong Polytechnic University, Hong Kong (China)

Prof. Rajiv Prakash Banaras Hindu University, India

Prof. Ashok Kumar Singh Indian Institute of Technology Roorkee, India

Dr. Dongning Wang The Hong Kong Polytechnic University, Hong Kong (China)

Xi'an Jiaotong University, China

Dr. Wen Wang Chinese Academy of Sciences, China

Dr. Xuemin Wang China Academy of Engineering Physics, China

Prof. Yong Yan University of Kent, UK

Dr. Zhengjun ZhaNational University of Singapore, SingaporeDr. Wenming ZhangShanghai Jiao Tong University, ChinaProf. Yong ZhangXi'an Jiaotong University, ChinaProf. Yong ZhaoNortheastern University, China



TABLE OF CONTENTS

Volume 2	Number 4	December 2012
A High Dyna	amic Range GMI Current Sensor	
A. Asfour, J.	P. Yonnet, M. Zidi	165
Effect of Mo	odulation Error on All Optical Fiber Current Transformers	
Z. P. Wang,	Y. K. Wang, S. Sun	172
Lookup Tab	ole Optimization for Sensor Linearization in Small Embedded Sy	ystems
L. E. Bengts	isson	177
Crayfish Rol	bot That Generates Flow Field to Enhance Chemical Reception	
M. Ohashi, Y	Y. Kagawa, T. Nakatsuka, H. Ishida	185
Nonlinear R	esponse of Multi-Segmented Photodetectors Used for Measuren	nents of Microcantilever
Motion over	Large Dynamic Ranges	
A. Kar. M.	George	196

Copyright © 2012 SciRes.

Journal of Sensor Technology (JST)

Journal Information

SUBSCRIPTIONS

The *Journal of Sensor Technology* (Online at Scientific Research Publishing, www.SciRP.org) is published quarterly by Scientific Research Publishing, Inc., USA.

Subscription rates:

Print: \$39 per issue.

 $To\ subscribe,\ please\ contact\ Journals\ Subscriptions\ Department,\ E-mail:\ sub@scirp.org$

SERVICES

Advertisements

Advertisement Sales Department, E-mail: service@scirp.org

Reprints (minimum quantity 100 copies)

Reprints Co-ordinator, Scientific Research Publishing, Inc., USA.

E-mail: sub@scirp.org

COPYRIGHT

Copyright©2012 Scientific Research Publishing, Inc.

All Rights Reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except as described below, without the permission in writing of the Publisher.

Copying of articles is not permitted except for personal and internal use, to the extent permitted by national copyright law, or under the terms of a license issued by the national Reproduction Rights Organization.

Requests for permission for other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works or for resale, and other enquiries should be addressed to the Publisher.

Statements and opinions expressed in the articles and communications are those of the individual contributors and not the statements and opinion of Scientific Research Publishing, Inc. We assumes no responsibility or liability for any damage or injury to persons or property arising out of the use of any materials, instructions, methods or ideas contained herein. We expressly disclaim any implied warranties of merchantability or fitness for a particular purpose. If expert assistance is required, the services of a competent professional person should be sought.

PRODUCTION INFORMATION

For manuscripts that have been accepted for publication, please contact:

E-mail: jst@scirp.org



Journal of Sensor Technology (JST)

ISSN 2161-122X (Print) ISSN 2161-1238 (Online) http://www.scirp.org/journal/jst

Journal of Sensor Technology should be the international journal devoted to research on sensor technologies including sensor design, implementation, characterizations and application oriented technical development. It is an interdisciplinary journal serving professionals with an interest in the exploitation of biological materials and designs in novel sensor diagnostic, supervision (or surveillance), and electronic devices including sensors, DNA chips, electronic noses, lab-on-a-chip, etc. Research of physical effects, measurement, theory, modeling and simulation of sensors, is welcome.

Editor in Chief

Prof. Ashok Srvastava

Louisiana State University, USA

Subject Coverage

The journal publishes original papers including but not limited to the following fields:

- Arrayed Sensors
- Biosensors
- Flow Sensors
- Interferometry Based Sensors
- MEMS Pressure Sensors
- Micro Accelerometers Mems Gyroscopes
- Microelectromechanical Systems (MEMS)
- Multi-Sensor Data Fusion

- Nano-Photonic Based Sensors
- Optical Fiber Based Sensors
- Sensor Fabrication and Packaging Techniques
- Sensor Networks
- Sensor Signal Processing
- Surface Enhanced Raman Scattering (SERS) Sensors
- Surface Plasmon Based Sensors
- Ultrasonic Transducers

We are also interested in: 1) Short reports—2-5 page papers where an author can either present an idea with theoretical background but has not yet completed the research needed for a complete paper or preliminary data; 2) Book reviews—Comments and critiques.

Notes for Intending Authors

Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. Paper submission will be handled electronically through the website. All papers are refereed through a peer review process. For more details about the submissions, please access the website.

E-mail: jst@scirp.org

Website and E-mail