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Smart Structures, Devices, and Systems III

Said F. Al-Sarawi
Chair/Editor

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Volume 6414

SPIE is an international technical society dedicated to advancing engineering and scientific applications of optical, photonic, imaging, electronic, and optoelectronic technologies.
Contents

ix Conference Committee
xi Introduction
xiii Symposium Sponsors

SESSION 1 ACTUATORS I

641403 State estimation of nonlinear piezoelectric stack actuator hysteresis model [6414-02]
J. L. Minase, T.-F. Lu, F. Wornle, The Univ. of Adelaide (Australia)

SESSION 2 RADIO FREQUENCY

641405 TCAM core design in 3D IC for low matchline capacitance and low power (Invited Paper) [6414-05]
E. C. Oh, P. D. Franzon, North Carolina State Univ. (USA)

641406 A broadband 8-18GHz 4-input 4-output Butler matrix [6414-06]
L. Milner, M. Parker, Defence Science and Technology Organisation (Australia)

641407 An optimized low-power voltage controlled oscillator [6414-08]
K. Shah, H. P. Le, J. Singh, La Trobe Univ. (Australia)

641408 A high-frequency divider in 0.18 um SiGe BiCMOS technology [6414-09]
N. Kamal, Y. Zhu, L. T. Hall, S. F. Al-Sarawi, Univ. of Adelaide (Australia); C. Burnet, I. Holland, A. Khan, A. Pollok, J. Poyner, Univ. of South Australia (Australia); M. Boers, J. A. Howarth, A. Lauterbach, J. Harrison, Macquarie Univ. (Australia); J. Rathmell, The University of Sydney (Australia); M. Batty, A. Parker, L. M. Davis, Macquarie Univ. (Australia); W. G. Cowley, Univ. of South Australia (Australia); N. H. E. Weste, Univ. of Adelaide (Australia) and Univ. of South Australia (Australia); D. Abbott, Univ. of Adelaide (Australia)

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The CID number appears on each page of the manuscript. The complete citation is used on the first page, and an abbreviated version on subsequent pages.
<table>
<thead>
<tr>
<th>SESSION 3</th>
<th>SENSORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>641409</td>
<td>A novel strain sensor using carbon nanotubes-organic semiconductor matrix composite on polymeric substrates (Invited Paper) [6414-10]</td>
</tr>
<tr>
<td></td>
<td>S. Jung, T. Ji, J. Xie, V. K. Varadan, The Univ. of Arkansas (USA)</td>
</tr>
<tr>
<td>64140B</td>
<td>Optimization of integrated antennas for wireless sensors [6414-12]</td>
</tr>
<tr>
<td></td>
<td>A. Gandelli, M. Mussetta, R. E. Zich, Politecnico di Milano (Italy)</td>
</tr>
<tr>
<td>64140C</td>
<td>Thin metal foil sensors [6414-13]</td>
</tr>
<tr>
<td></td>
<td>A. Wilson, P. McMahon, R. Muscat, O. Vargas, P. Vincent, Defence Science and Technology Organisation (Australia)</td>
</tr>
<tr>
<td>64140D</td>
<td>Potential system efficiencies for MEMS vibration energy harvesting [6414-14]</td>
</tr>
<tr>
<td></td>
<td>S. Behrens, CSIRO (Australia)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SESSION 4</th>
<th>POLYMERS/PZT</th>
</tr>
</thead>
<tbody>
<tr>
<td>64140E</td>
<td>Modeling of a fluid-filled ionic polymer-metal composite cylindrical shell (Invited Paper) [6414-15]</td>
</tr>
<tr>
<td></td>
<td>L. Zhang, Y. Yang. Nanyang Technological Univ. (Singapore)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SESSION 5</th>
<th>PHOTONIC/THZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>64140H</td>
<td>Integrated broadband microphotonic beamformer for adaptive nulling in smart antennas (Invited Paper) [6414-19]</td>
</tr>
<tr>
<td></td>
<td>B. Juswardy, K. Alameh, Edith Cowan Univ. (Australia); Y. T. Lee, Gwangju Institute of Science and Technology (South Korea)</td>
</tr>
<tr>
<td>64140I</td>
<td>Microwire fibers for low-loss THz transmission [6414-20]</td>
</tr>
<tr>
<td>64140J</td>
<td>Opto-VLSI-based reconfigurable free-space optical interconnects architecture [6414-21]</td>
</tr>
<tr>
<td></td>
<td>M. Aljada, K. E. Alameh, Edith Cowan Univ. (Australia); Y.-T. Lee, I.-S. Chung, Gwangju Institute of Science and Technology (South Korea)</td>
</tr>
<tr>
<td>64140K</td>
<td>Design and optimization of programmable lens array for adaptive optics [6414-22]</td>
</tr>
<tr>
<td></td>
<td>Z. Wang, S. H. Eng, K. Alameh, Edith Cowan Univ. (Australia)</td>
</tr>
<tr>
<td>64140L</td>
<td>Review of THz near-field methods [6414-23]</td>
</tr>
<tr>
<td></td>
<td>H. Lin, B. M. Fischer, S. P. Mickan, D. Abbott, The Univ. of Adelaide (Australia)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SESSION 6</th>
<th>DEVICES</th>
</tr>
</thead>
<tbody>
<tr>
<td>64140N</td>
<td>Template synthesis of nano- and micro-resonant tunneling diodes [6414-25]</td>
</tr>
<tr>
<td></td>
<td>S. K. Chakarvarti, National Institute of Technology, Deemed Univ., (India)</td>
</tr>
<tr>
<td>64140O</td>
<td>Fuzzy control of shear-mode MR damper under impact force [6414-26]</td>
</tr>
<tr>
<td></td>
<td>J. Cho, H. Y. Kim, T. Jung, J. Joh, Changwon Univ. (South Korea)</td>
</tr>
</tbody>
</table>
### SESSION 7  ACTUATORS II

<table>
<thead>
<tr>
<th>Paper ID</th>
<th>Title</th>
<th>Authors</th>
<th>Institution(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>64140P</td>
<td>Development of a mechanical mover device by compositing hydrogen storage alloy thin films with a perfluorosulfonic acid layer</td>
<td>T. Ogasawara, H.-H. Uchida, Y. Nishi</td>
<td>Tokai Univ. (Japan)</td>
</tr>
<tr>
<td>64140Q</td>
<td>Electro-acoustic and acousto-optic communications for robotic agents in smart structures</td>
<td>G. Wild, S. Hinckley</td>
<td>Edith Cowan Univ. (Australia)</td>
</tr>
</tbody>
</table>

### SESSION 8  STRUCTURES MONITORING

<table>
<thead>
<tr>
<th>Paper ID</th>
<th>Title</th>
<th>Authors</th>
<th>Institution(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>64140W</td>
<td>Health assessment of bonded composite repairs with frequency response techniques</td>
<td>C. White, Royal Melbourne Institute of Technology Univ., B. Whittingham, H. C. H. Li, I. Herszberg</td>
<td>Royal Melbourne Institute of Technology Univ. (Australia)</td>
</tr>
<tr>
<td>64140X</td>
<td>Influence of loading on structures actuated with piezoceramic transducers</td>
<td>V. G. M. Annamdas, Y. Yang, C. K. Soh</td>
<td>Nanyang Technological Univ. (Singapore)</td>
</tr>
<tr>
<td>64140Y</td>
<td>Design architecture for multi-zone HVAC control systems from existing single-zone systems using wireless sensor networks</td>
<td>A. Redfern, M. Koplow</td>
<td>Univ. of California at Berkeley (USA)</td>
</tr>
</tbody>
</table>

### SESSION 9  ANALOG/DIGITAL CIRCUITS

<table>
<thead>
<tr>
<th>Paper ID</th>
<th>Title</th>
<th>Authors</th>
<th>Institution(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>641411</td>
<td>An open source synthesisable model in VHDL of a 64-bit MIPS-based processor</td>
<td>D. R. Kelly, B. J. Phillips, S. Al-Sarawi</td>
<td>The Univ. of Adelaide (Australia)</td>
</tr>
<tr>
<td>641412</td>
<td>A data management layer for parallel matrix computation</td>
<td>A. Burdeniuk, K. To, C. C. Lim</td>
<td>The Univ. of Adelaide (Australia)</td>
</tr>
<tr>
<td>SESSION 10</td>
<td>FIBERS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>--------</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 641413     | Optimal configurations of active fiber composites based on asymptotic torsional analysis [<6414-45>](#)  
D. Harursampath, A. K. Tamrakar, Indian Institute of Science (India) |
| 641414     | Macro-fiber composite (MFC) as a delamination sensor in antisymmetric laminates [<6414-46>](#)  
S. Hari Krishna, Vikram Sarabhai Space Ctr. (India); D. Harursampath, Indian Institute of Science (India) |
| 641415     | Study on micro-bend light transmission performance of novel liquid-core optical fiber [<6414-48>](#)  
J. Ma, Nanjing Univ. of Aeronautics and Astronautics (China) and Qingdao Univ. (China); Z. Zhao, K. Wang, L. Guo, Nanjing Univ. of Aeronautics and Astronautics (China) |

<table>
<thead>
<tr>
<th>SESSION 11</th>
<th>IMAGERS AND VISION</th>
</tr>
</thead>
</table>
| 641416     | Bio-inspired pixel-wise adaptive imaging [<6414-49>](#)  
R. S. A. Brinkworth, E.-L. Mah, D. C. O’Carroll, The Univ. of Adelaide (Australia) |
| 641417     | MOEMS development of infrared security sensors [<6414-51>](#)  
K. C. Liddiard, Electro-optic Sensor Design (Australia) |
| 641418     | Bio-inspired optical rotation sensor [<6414-52>](#)  
D. C. O’Carroll, Univ. of Adelaide (Australia); P. A. Shoemaker, Tanner Research Inc. (USA); R. S. A. Brinkworth, Univ. of Adelaide (Australia) |

<table>
<thead>
<tr>
<th>SESSION 12</th>
<th>PROCESS/TECHNOLOGY</th>
</tr>
</thead>
</table>
| 641419     | MEMS design synthesis: integrating case-based reasoning and multi-objective genetic algorithms (Invited Paper) [<6414-53>](#)  
C. L. Cobb, Univ. of California at Berkeley (USA); Y. Zhang, Georgia Institute of Technology (USA); A. M. Agogino, Univ. of California at Berkeley (USA) |
| 64141A     | Response improvement of a mover device using hydrogen storage alloy powder by addition of catalyst [<6414-54>](#)  
A. Sato, K. Akazawa, T. Ogawara, H.-H. Uchida, Y. Nishi, Tokai Univ. (Japan) |
| 64141B     | Nickel silicide and titanium silicide formation: a comparison [<6414-55>](#)  
M. Bhaskaran, S. Sriram, A. S. Holland, J. du Plessis, RMIT Univ. (Australia) |

<table>
<thead>
<tr>
<th>SESSION 13</th>
<th>POSTER SESSION</th>
</tr>
</thead>
</table>
| 64141D     | Prototype ROIC with differential pixel readout for uncooled IR detector arrays [<6414-50>](#)  
S. J. Hwang, S. W. Ryu, H. H. Shin, M. Y. Sung, Korea Univ. (South Korea) |
A reconfigurable photonic bandpass RF filter employing a semiconductor optical amplifier and an opto-VLSI processor [6414-61]
R. Zheng, K. Alameh, Edith Cowan Univ. (Australia); Y. T. Lee, Gwangju Institute of Science and Technology (South Korea); Z. Wang, Edith Cowan Univ. (Australia)

Thin silicon shadow masks for organic light-emitting diodes (OLED) deposition processes [6414-62]
C.-C. Tseng, C.-C. Chiu, K.-X. Zhung, J.-H. Lee, G.-D. J. Su, National Taiwan Univ. (Taiwan)

Fabrication of high-aspect-ratio coil for electromagnetic actuators using LIGA process [6414-63]
D. Noda, Y. Matsumoto, S. Yamashita, M. Setomoto, T. Hattori, Univ. of Hyogo (Japan)

A novel photoelectric system for optical intelligent structure health monitoring [6414-64]
Z. Zhao, L. Guo, Y. Hou, J. Ma, K. Wang, Nanjing Univ. of Aeronautics and Astronautics (China)

The effect of structure perturbation on PBG of one-dimensional photonic crystals [6414-65]
X. Li, Y. Jiang, W. Xue, Z. Yu, H.-Q. Wang, Beijing Institute of Technology (China)

Multi-wavelength oscillation DFB solid-state dye laser with cascade-arranged gratings [6414-66]
N. Nakai, M. Fukuda, Chitose Institute of Science and Technology (Japan)

Fabrication of gratings with moire fringes and their application to solid-state dye laser [6414-67]
K. Miura, M. Fukuda, Chitose Institute of Science and Technology (Japan)

Tunable properties of dielectrics thick film added MgO and Li2CO3 to BST [6414-70]
I. S. Kim, S. J. Jeong, B. K. Min, J. S. Song, Korea Electrotechnology Research Institute (South Korea); S. H. Jeon, Kyungnam Univ. (South Korea)

Calibration of wavelength shift for a fibre Bragg grating using a single mode laser source [6414-72]
H. Ji, A. B. Wedding, L. X. Kong, H. Y. Hsu, G. C. L. Lin, Univ. of South Australia (Australia); K. C. Fan, National Taiwan Univ. (Taiwan)

Camphor sulfonic acid-doped polyaniline nanofiber-based 64° YX LiNbO3 SAW hydrogen gas sensor [6414-73]
W. Wlodarski, A. Z. Sadek, RMIT Univ. (Australia); C. Baker, Univ. of California, Los Angeles (USA); K. Kalantar-zadeh, RMIT Univ. (Australia); R. B. Kaner, Univ. of California, Los Angeles (USA); D. Mulcahy, Univ. of South Australia (Australia)

Modelling of coplanar waveguide transmission lines in multiple metal layer processes [6414-74]
E. Heading, Flinders Univ. (Australia); H. J. Hansen, M. E. Parker, Defence Science and Technology Organisation (Australia)

Motion detection with a view toward VLSI implementation [6414-75]
X. J. Tan, S. Chong, T. Rainsford, S. Al-Sarawi, The Univ. of Adelaide (Australia)
The effect of inter-pixel nested ridges incorporated in a stacked gradient homojunction photodiode architecture [6414-76]
P. V. Jansz, S. Hinckley, Edith Cowan Univ. (Australia)

Terahertz detection of substances for security related purposes [6414-77]
B. Ung, J. Balakrishnan, B. Fischer, B. W.-H. Ng, D. Abbott, The Univ. of Adelaide (Australia)

Grooved infrared polarizers with a reduced reflectance [6414-78]
I. Yamada, Ryukoku Univ. (Japan); J. Nishii, National Institute of Advanced Industrial Science and Technology (Japan); M. Saito, Ryukoku Univ. (Japan)

Optimised MEMS-based reconfigurable VCO for a mobile receiver [6414-80]
H. P. Le, J. Singh, La Trobe Univ. (Australia)

Development of a tendon driven system using a pneumatic balloon [6414-82]
R. Sato, J. Nagase, N. Saga, S. Chonan, Akita Prefectural Univ. (Japan)

A compact optical fiber scanner for medical imaging [6414-83]
N. Dhaubanjar, H. Hu, D. Dave, P. Phuyal, J. Sin, H. Stephanou, J.-C. Chiao, The Univ. of Texas at Arlington (USA)

Investigation of vertical displacement thermal actuators [6414-84]
N. Dhaubanjar, S. M. N. Rao, H. Lun-Chen, M. Luquire, D. Popa, The Univ. of Texas at Arlington (USA); M. Chiao, The Univ. of British Columbia (Canada); H. Stephanou, J.-C. Chiao, The Univ. of Texas at Arlington (USA)

A cantilever-type electrostatic zipping actuator [6414-85]
N. Dhaubanjar, S. M. N. Rao, Y. Cai, D. Popa, The Univ. of Texas at Arlington (USA); M. Chiao, The Univ. of British Columbia (Canada); J.-C. Chiao, The Univ. of Texas at Arlington (USA)

An RNS public key cryptography accelerator [6414-86]

Control performance of pneumatic artificial muscle [6414-87]
N. Saga, S. Chonan, Akita Prefectural Univ. (Japan)

Implementation of saturation for modelling pattern noise using naturalistic stimuli [6414-88]
S. Rajesh, T. Rainsford, R. S. A. Brinkworth, D. Abbott, D. C. O’Carroll, The Univ. of Adelaide (Australia)

An active locking mechanism for assembling 3D micro structures [6414-89]
P. Zhang, M. Mayyas, W. H. Lee, D. Popa, P. Shiakolas, H. Stephanou, J. C. Chiao, The Univ. of Texas at Arlington (USA)

Experimental comparisons between McKibben type artificial muscles and straight fibers type artificial muscles [6414-90]
T. Nakamura, Chuo Univ. (Japan)

Author Index
Conference Committee

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Actuators I
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Radio Frequency
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Sensors
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Polymers/PZT
Kevin C. Liddiard, Electro-optic Sensor Design (Australia)

Photonic/THz
Hedley J. Hansen, Defence Science and Technology Organisation (Australia)

Devices
Said F. Al-Sarawi, The University of Adelaide (Australia)

Actuators II
Said F. Al-Sarawi, The University of Adelaide (Australia)

Structures Monitoring
Olaf Reinhold, Defence Science and Technology Organisation (Australia)

Analog/Digital Circuits
Braden J. Phillips, The University of Adelaide (Australia)

Fibers
Rong Zheng, Edith Cowan University (Australia)

Imagers and Vision
Brian Ng, The University of Adelaide (Australia)

Process/Technology
Said F. Al-Sarawi, The University of Adelaide (Australia)
Introduction

The Smart Structures, Devices, and Systems conference was part of SPIE’s 2006 Symposium on Smart Materials, Nano- and Micro-Smart Systems III held at the University of Adelaide, Adelaide, Australia. Four other parallel conferences were held as part of this symposium: Smart Materials IV, Micro- and Nanotechnology III, Biomedical Applications of Micro- and Nanoengineering III, and Complexity and Nonlinear Dynamics.

The papers in these proceedings represent some of the latest research issues in the field of smart structures that are used for devices and systems implementation. The presented research covered a broad spectrum of topics such as actuators, polymers, PZT, photonics, sensors, structure monitoring, and fibers. Due to the great demand in this conference for oral presentations, two parallel sessions were set up the first day. This seemed to be popular with the delegates and the authors.

The conference chair and co-chairs would like to thank the symposium chairs, Joe Shapter (Flinders University), Vijay K. Varadan (University of Arkansas), and Derek Abbott (The University of Adelaide), for their superb work and effort.

Special thanks are due to the plenary speakers: Peter Hanggi “Brownian Motion Reigning Manipulation and Transport on the Nanoscale,” Benjamin Eggleton “Microphotonics for Signal Processing, Microfluidics and Sensing Applications,” Hywel Morgan “Microfluidic Analytical Systems for High-Throughput Multiplexed Bio-assays,” Vijay Varadan “The Role of Nanotechnology and Monitoring and Control of Cardiovascular Diseases and Neurological Disorders,” and Barry Luther-Davies “All Optical Processing for Advanced Communications Systems.” These speakers did a wonderful job in setting the scene for the conference.

Special thanks are due to SPIE staff for their very professional organization of this conference. All the hard work producing the materials, managing the website, liaising with conference chairs, co-chairs, and participants was done by the SPIE, thus considerably lightening the load for the Chairs and Committee to get research outcomes to the research communities in a timely matter. The committee members of this conference must also be thanked for their excellent support and labors. Finally, our appreciation must go to all the delegates for sharing their research, vision, enthusiasm, and stimulating questions. The resulting interaction made this a very vibrant conference.
In order to comply with the requirements of some institutions, the authors were able to have their full manuscripts peer-reviewed by the international conference committee listed in these proceedings.

Said F. Al-Sarawi
Vijay K. Varadan
Neil H. E. Weste
We wish to thank the co-sponsors for their contribution to the success of the conference:

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