

## Oral Session 4 口頭報告 IV

9:00-10:30, June 2<sup>nd</sup>, 2018 (Saturday)

Session: Physical & Mechanical Micro Devices and Systems I

Venue: Room BX

Chairs: 蔡耀全教授 / 吳文中教授

| Time        | Paper  | Page |
|-------------|--|------|
| 9:00-9:30   | <b>Invited speaker:</b> 吳文中教授<br>Micro Piezoelectric Vibration Energy Harvesters |      |
| 9:30-9:42   | <b>A2-00-0002</b><br>電鍍鎳銅合金薄膜溫度特性影響之研究<br>莊賀喬, 江冠緯                               |      |
| 9:42-9:54   | <b>A4-00-0010</b><br>基於軟性電路板(FPCB)製程之可植入式壓力感測器<br>陳佑任, 蔡佩倫, 邱一                   |      |
| 9:54-10:06  | <b>A4-00-0004</b><br>開發紙材/PMMA 複合微流體平台探討細胞因子之擴散影響<br>何玗臻, 李健峰, 莊昀儒               |      |
| 10:06-10:18 | <b>A4-00-0007</b><br>新型 CMOS-MEMS 電感式觸覺感測器整合微型受力介面<br>葉勝凱, 張恒中, 方維倫              |      |
| 10:18-10:30 | <b>A4-00-0013</b><br>無線圈式可熱重置磁化之熱磁-壓電式直流磁感測器<br>陳勁中, 陳翊倫, 段皓, 鍾添淦                |      |

Session: Electrochemical Sensing Technologies III

Venue: Room BY

Chair: 林正嵐教授

| Time        | Paper   | Page |
|-------------|---|------|
| 9:00-9:30   | <b>Invited speaker:</b> 林家裕教授<br>Nanostructured CuBi <sub>2</sub> O <sub>4</sub> : Synthesis and its applications in amperometric detection of glucose  |      |
| 9:30-9:42   | <b>B1-00-0035</b><br>Boron-doped carbon nanotubes with uniform boron doping and tunable dopant functionalities as an efficient electrocatalyst for dopamine oxidation reaction<br>M. H. Yeh, T. J. Li, W. C. Chiang, Y. S. Li, Y. A. Leu, J. J. Lin, K. C. Ho                           |      |
| 9:42-9:54   | <b>B1-00-0014</b><br>MoS <sub>2</sub> @f-MWCNTs nanocomposite for highly sensitive determination of chloramphenicol in milk, and honey samples<br>Pei-Hung-Lin, Mani Govindasamy, Shen Ming Chen, Rajaji Umamaheswari   |      |
| 9:54-10:06  | <b>B1-00-0020</b><br>Synthesis and application of bismuth ferrite nanosheets supported functionalized carbon nanofiber for enhanced electrochemical detection of toxic organic compound in water samples<br>Qin Jin Yeah, Sukanya Ramaraj, Sakthivel Mani, Shen Ming Chen, Bih-Show Lou |      |
| 10:06-10:18 | <b>B1-00-0023</b>   |      |

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|             | Design of Novel Ytterbium Molybdate Nano-flakes Anchored Carbon Nanofibers: A Challenging Sustainable Catalyst for the Detection and Degradation of Assassination Weapon (Paraoxon-Ethyl)<br>Han-Yu Yang, Raj Karthik, Jeyaraj Vinoth Kumar, Shen-Ming Chen, Thangavelu Kokulnathan, Velluchamy Muthuraj |  |
| 10:18-10:30 | <b>B1-00-0038</b><br>整合磁珠與電化學阻抗頻譜法檢測 adalimumab 的研發<br>林明杰, 吳靖宙  |  |

Session: Semiconductor and Electric Sensing Technologies I

Venue: Room BZ

Chair: 周榮泉教授

| Time        | Paper   | Page |
|-------------|---|------|
| 9:00-9:30   | <b>Invited speaker:</b> 王玉麟教授<br>Mobile diagnostic with one drop of blood   |      |
| 9:30-9:42   | <b>B4-00-0003</b><br>Whole Bacterial Cell Detection by Polysilicon Nanowire Field Effect Transistors<br>鄭采和; 任書儀; 楊裕雄 |      |
| 9:42-9:54   | <b>B4-00-0007</b><br>以基於石墨烯的離子感測場效電晶體提高靈敏度<br>張育豪; 徐偉恩; 林致廷   |      |
| 9:54-10:06  | <b>B4-00-0014</b><br>以延伸式閘極場效應電晶體檢測多巴胺與 DNA 適體之間的交互作用<br>廖育權; 蔡麗珠; 陳逸聰; 陳啟東   |      |
| 10:06-10:18 | <b>B4-00-0032</b><br>The Application of Silicon Nanowire Field-Effect Transistors in Vaccine Development<br>施凱偉; 林淑萍  |      |
| 10:18-10:30 | <b>B4-00-0023</b><br>模擬體液與全血於閘極之穩定性檢測 及 B 型利鈉激素(BNP)抗體與蛋白質之檢測<br>黃妹文, Indu Saragadharan, 王玉麟                          |      |

Session: Emerging Sensing Technologies II

Venue: Room 2X

Chair: 周學韜教授

| Time      | Paper   | Page |
|-----------|---|------|
| 9:00-9:30 | <b>Invited speaker:</b> 呂家榮教授<br>Organic Vapor Sensors Employing Localized Surface Plasmon Resonance of Metallic Nanoparticles  |      |
| 9:30-9:42 | <b>C4-00-0022</b><br>The Electrical Evaluation of Reduced Graphene Oxide Nanoribbons with Exposure to Varied Wavelengths of Light<br>Nai Jia Chen, Chia Liang Sun, Shu Ping Lin |      |

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|-------------|--|--|
| 9:42-9:54   | <b>C4-00-0002</b><br>Caenorhabditis elegans enabled worm on a chip for cancer prescreening<br>陳韋龍, 陳駿睿, 陳昌熙, 莊漢聲 |  |
| 9:54-10:06  | <b>C4-00-0003</b><br>三維紙張免疫分析平臺<br>劉照瑄, 陳巧玟, 陳世杰, 陳俊安, 陳建甫   |  |
| 10:06-10:18 | <b>C4-00-0008</b><br>低成本 PET 觸控薄膜應用於尿液檢測技術開發<br>高尉馨, 嚴瑋星, 林哲信  |  |
| 10:18-10:30 | <b>C4-00-0009</b><br>可供臨床微生物拉曼光譜增顯技術-結合銀濾膜與金奈米星基材<br>吳建融, 曾心凌, 林其昌, 郭明澤  |  |

Session: Optical Sensing Technologies IV

Venue: Room 2Y

Chair: 魏培坤教授

| Time        | Paper  | Page |
|-------------|--|------|
| 9:00-9:30   | <b>Invited speaker:</b> 周禮君教授<br>Aspects of Nanoplasmonic Biosensors   |      |
| 9:30-9:42   | <b>B2-00-0010</b><br>Study of CIGS2 Films by Raman Scattering and Photoluminescence for Opto-Electro Sensing Technology<br>Chia-Chun Tai; Chia-Wen Chang; Jyh-Jier Ho; Wei-Sheng Lin; Yung-Tsung Liu; Tung-Po Hsieh; Song-Yeu Tsai |      |
| 9:42-9:54   | <b>B2-00-0023</b><br>Cys/AuNPs/TiO <sub>2</sub> composite films applied for LSPR based Cu <sup>2+</sup> sensor<br>江冠樺; 周學韜; 李修齊; 鄧又綸; 黃偉豪; 吳添銘   |      |
| 9:54-10:06  | <b>B2-00-0025</b><br>在複雜溶液環境中進行表面增強拉曼光譜量測的技術<br>陳冠穎; 李智捷; 陳奕帆  |      |
| 10:06-10:18 | <b>B2-00-0029</b><br>Development of Aptamer-Based Sensor for Quantitative Detection of Mercury (II) Ions by Surface-Enhanced Infrared Absorption Spectroscopy<br>劉家蔚; 蔡田峻; 張憲彰   |      |
| 10:18-10:30 | <b>B2-00-0043</b><br>Plasmonic Tip Enhanced Inelastic Scattering<br>R. H. Jiang; H. J. Chou; J. Y. Chu; C. Chen; T. J. Yen   |      |

