

### Oral Session 3 口頭報告 III

16:30-18:00, June 1<sup>st</sup>, 2018 (Friday)

Session: Energy Harvesting and Power MEMS / RF and Optical MEMS

Venue: Room BX-2

Chairs: 林明澤教授 / 莊承鑫教授

Time	Paper	Page
16:30-17:00	<b>Invited speaker:</b> 莊承鑫教授 印刷式電性感測生物晶片應用於尿路疾病免疫分析	
17:00-17:12	<b>D1-00-0002</b> High Performance a Skin Patch Flexible Piezoelectric Pulse-wave Energy Harvester J.T. Chien, W.H. Tang, C.T. Chen, S.C. Lin, W.J. Wu	
17:12-17:24	<b>D1-00-0004</b> Surface Engineering of Triboelectric Nanogenerator by Fluorinated Self-Assembled Monolayers Wen-Yi Liao, Wen-Xuan Huang, Yu-Chen Hsiao, Chih-Yu Chang	
17:24-17:36	<b>D1-00-0006</b> Enhancement of thermoelectric properties in nano-gap device 李承翰, 黃皓庭, 衛榮漢	
17:36-17:48	<b>D2-00-0001</b> 結合放大電路與光微感測器之單晶片 單為昕	
17:48-18:00	<b>D2-00-0002</b> Support Transducer Design to Enable Piezoelectrically Transduced Lamé-mode Resonator and Oscillator Gayathri Pillai	

Session: Electrochemical Sensing Technologies II

Venue: Room BY

Chair: 莊漢聲教授

Time	Paper	Page
16:30-17:00	<b>Invited speaker:</b> 黃貞翰教授 Integrated Internet of Things (IoT) Magneto-Electro Chemical Sensor For On-Site Food Allergen Detection	
17:00-17:12	<b>B1-00-0013</b> Hierarchically structured porous RGO/CuFe <sub>2</sub> O <sub>4</sub> nanodots for sensitive detection of oxidative stress biomarker in biological fluids Tse-Wei Chen, Umamaheswari Rajaji, Shen-Ming Chen, Mani Govindasamy, Kuo-Lin Huang	
17:12-17:24	<b>B1-00-0015</b> Screen-printed electrode modified with a composite prepared from graphene oxide and Mn <sub>3</sub> O <sub>4</sub> microcubes for ultrasensitive determination of nitrite Kuang-Hsiang-Chen, Akilarasan Muthumariappan, Shen-Ming-Chen, Mani Govindasamy	
17:24-17:36	<b>B1-00-0018</b> Ultrasensitive Detection of Phenolic Contaminants in Varied Water Resources Using Hydrothermally Synthesized 3D-Cobalt Oxide Polyhedrons Yu-Chi Chen, Kogularasu Sakthivel, Shen-Ming-Chen, Mani Govindasamy	

### Oral Session 3 口頭報告 III

16:30-18:00, June 1<sup>st</sup>, 2018 (Friday)

17:36-17:48	<b>B1-00-0032</b> Rapid detection of beta-amyloid in Alzheimer's disease with an ultra-high sensitivity by electrochemical impedance spectroscopy Han-Chien Chuang, Tzu-Chuan Huang, Jung-Chih Chen	
17:48-18:00	<b>B1-00-0021</b> Self-assembled NiO-based DNA probing electrochemical biosensor for EGFR exon 19 mutation status detection in non-small cell lung carcinoma patients Y.H. Kang, P.H. Tsou, B.R. Li	

Session: Optical Sensing Technologies III

Venue: Room 2X

Chair: 林淑萍教授

Time	Paper	Page
16:30-17:00	<b>Invited speaker:</b> 陳建甫教授 Miniaturized Analytical Devices for Point-of-Care Diagnostic Applications	
17:00-17:12	<b>B2-00-0001</b> High Resolution of Microarray Fluorescence Scanner R. Y. Tsai; J.P. Chen; F.H. Lo; C.C. Pien; J.D. Lee; J.C. Yang,; . W. Hsu; G. Tiao	
17:12-17:24	<b>B2-00-0005</b> Development of an Inverse-Opal Photonic Crystal Biosensing Device with Enhanced Fluorescence Ching-Chuen Chen; Ryan-Chang Tseng; Han-Sheng Chuang	
17:24-17:36	<b>B2-00-0008</b> 2D photonic crystals for glucose sensing Chien-Chun Chen; Yu-Yang Liao; Yung-Tsan Chen; Jian-Jang Huang	
17:36-17:48	<b>B2-00-0016</b> Spectral Interferometry-based Surface Plasmon Resonance on the Non-resonant Telecommunication Wavelengths Meng-Syuan Jian; Ding-Zhang Tsai; Yu-Sian Syu; and Shih-Hsiang Hsu	
17:48-18:00	<b>B2-00-0017</b> 利用電化學表面電漿子共振技術即時逐步調控氧化石墨烯之氧官能團於生醫晶片的檢測機制之探討 吳懷平; 楊承都; 陳吉助 戴銘宗; 邱南福	

Session: Emerging Sensing Technologies I

Venue: Room 2Y

Chair: 楊裕雄教授

Time	Paper	Page
16:30-17:00	<b>Invited speaker:</b> 吳志明教授 Recent Progress on Smart Nanogenerator and Active Sensor	
17:00-17:12	<b>C2-00-0004</b> The practicality of an electrokinetic platform for rapid bacterial quantification 吳宗展, 卓彥良, 蔡田峻, 張憲彰	

### Oral Session 3 口頭報告 III

16:30-18:00, June 1<sup>st</sup>, 2018 (Friday)

17:12-17:24	<b>C2-00-0005</b> Rapid Biochemical Mixture Screening by Three-Dimensional Patterned Multifunctional Substrate with Ultra-Thin Layer Chromatography (UTLC) and Surface Enhanced Raman Scattering (SERS) 李璧伸, 林丕晟, 林鼎晟, 嚴大任	
17:24-17:36	<b>C3-00-0001</b> Vertical-integrated Formaldehyde Sensing System Based on Semi-transparent Photo Detector Ching-Fu Lin, Hsiao-Wen Zan	
17:36-17:48	<b>C3-00-0011</b> Selective NH <sub>3</sub> -NO gas sensor based on ZnGa <sub>2</sub> O <sub>4</sub> epilayer grown by MOCVD Min-Ru Wu, Wei-Zhong Li, Yuan-Chu Shen, Si-Han Tsai, Ray-Hua Horng	
17:48-18:00	<b>C4-00-0014</b> 建立活體鮑氏不動桿菌核酸適體篩選方法與臨床檢測評估 洪堡筵, 劉昌邦, 李博仁	

