

## Poster-Oral Session 1 壁報-口頭報告 I

13:30-14:00, June 1<sup>st</sup>, 2018 (Friday)

Session: Physical Sensors / Applied MEMS I

Venue: Room BX-2

Chairs: 鄒慶福教授 / 李健峰教授

Time	Paper	Page
13:30-14:00 (2 min/each)	<b>A1-00-0001</b> Performance Evaluation with Various Buffer Layers Based in CIGSe <sub>2</sub> Cells Applied for Opto-electrical Technology Da-Ming Yu, Jen-Chuan Chang, Jyh-Jier Ho, Tung-Po Hsieh, Song-Yeu Tsai	
	<b>A1-00-0006</b> 溫度對於加熱式高分子/多壁奈米碳管複合材料氣體感測器之影響探討 林澤嫩, 吳晉晟, 黃煜傑, 邱俊誠	
	<b>A1-00-0009</b> 連續製程軸偏檢測用熱阻式應變規 廖冠勛, 羅丞曜	
	<b>A1-00-0013</b> Opto and magneto dual imaging platform for rapid ex-vivo and in-vivo discrimination of tumors Ging-Rue Liou, Wen-Chu Wei, Jen-Jie Chieh, Kai-Wen Huang, Hong-Chang Yang, Heng-Er Horng	
	<b>A1-00-0014</b> 鋅鈦酸鉛與氧化鋅薄膜製作之壓電微加工超音波傳感器特性探討 江政諺, 劉華晉, 馮國華	
	<b>A1-00-0019</b> 比較平面與聚焦超音波之空穴效應 曾詩婷, 陳榮治, 陳景欣	
	<b>A1-00-0020</b> Research of Flexible Dye-Sensitized Solar Cell with TiO <sub>2</sub> Pei-Jung Wu, Jian-Yang Lin, Ling-Chuan Hsieh	
	<b>A1-00-0022</b> 熱磁薄膜之簡易無雜質參雜之熱處理製程研究 陳勁中, 陳翊倫, 方麟輝, 鍾添淦	
	<b>A2-00-0003</b> 以 Breath Figure 法形成單層液態微透鏡陣列之研究 張勇祥, 周士涵, 張元震	
	<b>D1-00-0001</b> Preliminary Study of a Piezoelectric Energy Cantilever for Energy harvesting and Disturbance Torque Absorption Tsung-Yi Chuang, Yu-Jen Wang	
	<b>D1-00-0003</b> Development of a Thermoelectric Energy Generator with High Area Density of Thermocouples Y.S. Hsu, S.H. Wang, S.M. Yang	
	<b>D1-00-0005</b> 圓柱狀駐極體振動式能量擷取器	

## Poster-Oral Session 1 壁報-口頭報告 I

13:30-14:00, June 1<sup>st</sup>, 2018 (Friday)

	謝佳君, 楊孟修, 邱一	
	<b>D2-00-0003</b> Theoretical Modeling of a Temperature-Insensitive CMOS-MEMS Free-Free Beam Resonator Jia-Ren Liu, Wei-Chang Li	
	<b>D3-00-0001</b> Digital Fluid Manipulation On A Microfluidic Paper-based Device With Low Cost Karthick Mani, Yong-Jin Wu, Chia-Yuan Chen	

Session: Electrochemical Sensing Technologies I

Venue: Room BY

Chairs: 廖書賢教授 / 王詩涵教授

Time	Paper	Page
13:30-14:00 (2 min/each)	<b>B1-00-0002</b> Enhancing Solid-Contact Ion-Selective Electrode Performance via Improvement of Ion-Selective Membrane Fabrication Chi-Han Lu, Lin-Chi Chen	
	<b>B1-00-0003</b> A disposable non-enzymatic histamine sensor based on the copper phosphate electrodes fabricated by a simple chemical oxidation method M.Y. Lee, C.C. Wu, M.I. Sari and Y.H. Hsieh	
	<b>B1-00-0004</b> 以幾丁聚醣/奈米二硫化錫之乙醯膽鹼酯酶感測器檢測有機磷農藥 許志維, 黃靖紋, 鍾仁傑	
	<b>B1-00-0006</b> 以氧化石墨烯/ $\beta$ -環糊精/奈米二硫化錫感測器檢測褪黑激素 張寧, 鍾仁傑	
	<b>B1-00-0007</b> 以奈米片狀二硫化錫製作唾液型皮質醇電化學生物感測器 譚宇呈, 羅靜淑, 鍾仁傑	
	<b>B1-00-0010</b> Minimization of the potential drift for a solid-state Ag/AgCl reference electrode Yi-Min Wu, Lin-Chi Chen	
	<b>B1-00-0011</b> 可撓式加熱平台應用於電阻式導電高分子奈米複合氣體感測器 邱俊誠, 吳晉晟, 林澤嫩	
	<b>B1-00-0012</b> Electrocardiograph Device with R and T Wave Detection Algorithm Chuan-hui Ou, Wan-Ting Tsai, Yao-Chuan Tsai	
	<b>B1-00-0017</b> One-pot synthesis of three-dimensional Mn <sub>3</sub> O <sub>4</sub> microcubes for high-level sensitive detection of head and neck cancer drug nimorazole Yi-Ting Ye, Akilarasan Muthumariappan, Shen-Ming-Chen, Rajaji	

## Poster-Oral Session 1 壁報-口頭報告 I

13:30-14:00, June 1<sup>st</sup>, 2018 (Friday)

Umamaheswari	
<b>B1-00-0019</b> Biosynthesis of gold nanoparticles using plant leaves extract encapsulated with graphene oxide and their new avenues in electrochemical sensor for the dopamine detection Shih-Hao Lin, R. karthik, K. Saravanakumar, Shen-Ming Chen, J. Vinoth Kumar, Chia-Ming Lee, Bih-Show Lou	
<b>B1-00-0025</b> 利用網版印刷碳電極開發微小核糖核酸電化學感測器 李霖, 翁聖翔, 翁文慧	
<b>B1-00-0027</b> 探討高溫退火溫度對氧化石墨烯奈米帶的光電化學生物感測的影響 林承玄, 郭家亨, 孫嘉良	
<b>B1-00-0028</b> 合成氧化石墨烯奈米帶並應用於光電化學生物偵測 郭家亨, 林本盛, 孫嘉良	
<b>B1-00-0030</b> The Study of Polyaniline Film Electrode by Electrochemical Deposition to Evaluate the Feasibility of Tau Protein Dephosphorylation H.Y. Chen, H.Y. Tsai, C.Y. Cho, J.C. Chen	
<b>B1-00-0031</b> Immobilization of ALP on the PANI-GA-modified Working Electrode by Electrochemical and that Dephosphorylates Tau Protein H.Y. Tsai, J.C. Chen	

Session: Portable Sensors and Emerging Sensing Technologies I

Venue: Room BZ

Chairs: 陳奕帆博士 / 蔡嬪嬪教授

Time	Paper	Page
13:30-14:00 (2 min/each)	<b>C4-00-0013</b> Effect of Calcining Temperature on the Photovoltaic Conversion Efficiency of GO/TiO <sub>2</sub> Nanofiber in Photoanode Materials of Dye-sensitized Solar Cells Hui-Hsuan Hsu; Yu-Hsun Nien; Jung-Chuan Chou; Yi-Hung Liao; Chih-Hsien Lai; Huang-Hua Chen; Chien-Hung Kuo; Cheng-Chu Ko	
	<b>C4-00-0015</b> Preparation of the titanium dioxide nanofibers containing graphene oxide and silver nanoparticles by electrospinning for the composite photoanode of dye-sensitized solar cells. Huang-Hua Chen; Yu-Hsun Nien; Jung-Chuan Chou; Yi-Hung Liao; Chih-Hsien Lai; Hui-Husan Hus; Chien-Hung Kuo; Cheng-Chu Ko	
	<b>C4-00-0016</b> 以嵌入式系統開發表面電漿共振感測器之多執行緒架構的自動化影像分析系統 夏晨軒; 王超; 柯孟琪	

**Poster-Oral Session 1 壁報-口頭報告 I**

13:30-14:00, June 1<sup>st</sup>, 2018 (Friday)

<b>C4-00-0017</b> 高靈敏度紙張分析元件 張慈友; 林竑廷; 黃家榆; 陳建甫	
<b>C4-00-0021</b> Development of An ITO-based Optically Transparent Thin-layer Electrode by Electrodeposition for Spectroelectrochemical Sensing 黃仲楷	
<b>C4-00-0018</b> Microwave Dielectric Properties of (Mg(1-x)Znx)2SnO4 Ceramics for Application in Patch Antenna Temperature Sensor Yih-Chien Chen and Yue-Xuan Du	
<b>C4-00-0020</b> Liquid Crystal pH Sensor Chip for Real-Time and Remote Monitoring Water Quality in Flow System Tsung Yang Ho; Chih-Hsin Chen	
<b>C4-00-0025</b> Aptamer-Controlled Inhibition of Chemical Etching of Triangular Gold Nanoplates for Colorimetric Detection of Chloramphenicol C.C. Chang; G. Wang; T. Takarada; M. Maeda	
<b>C4-00-0026</b> 開發智慧型手機偵測試紙型生物感測器對金離子之感測 郭凱弘, 陳珮璇, 林潔, 陳建甫, 李以仁, 葉怡均	
<b>C4-00-0027</b> Application of Self-Powered Thermoelectric Sensor for Mercury Ion Detection in the Environment 林玉箴; 曹育翔; 林宗宏	
<b>C4-00-0028</b> A study on ultra-short pulsed laser hole-drilling process for ceramic sheets Chi-Huang Huang; Tien-Li Chang; Shih-Feng Tseng	
<b>C4-00-0029</b> Chitosan-Based Triboelectric Nanogenerator Textiles for Self-Powered Wearable Electronic and Medical Systems. Che-Min Chiu; Yun-Ting Jao; Zong-Hong Lin	
<b>C4-00-0030</b> Development of Smart Contact lens for Intraocular Pressure Measurement M.C. Hsieh; H.L. Chiu; Y.C. Liao; A.B. Wang	
<b>C4-00-0031</b> Development of new enzyme-free biosensing system with chain-reaction for rapid diagnosis in Bladder tumor 彭晨; 陳映慈; 馮思中; 楊閔蔚	
<b>C4-00-0032</b> A colorimetric biosensing system for home breast cancer diagnosis 許盈培	

Session: Optical Sensing Technologies II  
Venue: Room 2X

## Poster-Oral Session 1 壁報-口頭報告 I

13:30-14:00, June 1<sup>st</sup>, 2018 (Friday)

Chairs: 林宗宏教授 / 黃素真教授

Time	Paper	Page
13:30-14:00 (2 min/each)	<b>B2-00-0002</b> Simulation and Fitting of Transmission Small Angle X-ray Scattering Signal for Critical Dimension Measurements Bo-Ching He; Chun-Ting Liu; Guo-Dung Chen; Ting-Ting Chen; Wei-En Fu	
	<b>B2-00-0007</b> Sensing on Glass Substrate based on Lossy Mode Resonances by Indium-Tin-Oxide Thin Films B.Y. Lin; Y.C. Lin; T.S. Lin	
	<b>B2-00-0011</b> 雙光纖結構之即時性鋅離子感測器 郭聖佑; 李博仁; 孟心飛; 冉曉雯	
	<b>B2-00-0012</b> 新穎剪干涉式相位式表面電漿子共振生物感測器 羅慧芸; 吳子珩; 王姿懿; 陳一銘; 楊景旭; 柯孟琪; 林啟萬	
	<b>B2-00-0013</b> 以石墨烯量子點與金奈米粒子調制電漿子能量耦合螢光機制於快速檢測胰臟癌指數(CA19-9)之研究 吳瑋仁; 邱南福	
	<b>B2-00-0014</b> 主動式色變電漿子可視化生醫感測晶片之研發 戴銘宗; 顏昱捷; 邱南福	
	<b>B2-00-0015</b> 背面入射式介電奈米光柵耦合表面電漿共振感測器之分析 郭炳宏; 郭文凱	
	<b>B2-00-0021</b> 自動化表面電漿子共振光學機構檢測之設計與模擬 楊健宏; 施文彬; 林啟萬	
	<b>B2-00-0022</b> Picosecond laser surface treatment of black silicon for the light absorption improvement of solar cells Cheng-Ying Chou; Shih-Feng Tseng; Tien-Li Chang	
	<b>B2-00-0024</b> Multifunctional Magnetic Nanoparticles for Tumor Cell Imaging and Detection SL Sahoo; CH Liu	
	<b>B2-00-0026</b> 以具有孔隙狀結構的奈米電漿子粒子進行非法藥品的表面增強拉曼光譜檢測 李智捷; 洪尚溫; 陳韻竹; 陳奕帆	
<b>B2-00-0027</b> 以恆溫核酸擴增反應檢測四環黴素之技術		

**Poster-Oral Session 1 壁報-口頭報告 I**

13:30-14:00, June 1<sup>st</sup>, 2018 (Friday)

	吳家丞; 吳禮安; 周律廷; 陳奕帆	
	<b>B2-00-0030</b> 利用甘露醣為探針於光纖式粒子電漿共振生物感測器對大腸桿菌檢測 Hsuan-Ting Lin; Yen-Ta Tseng; Lai-Kwan Chau; Ching-Ching Yu	
	<b>B2-00-0032</b> 以金奈米粒子與氧化石墨烯複合材料增強表面電漿子於無標記免疫法 之快速生物檢測機制研究 吳瑋仁; 邱南福	
	<b>B2-00-0033</b> 以官能化二硫化鉬增強表面電漿子共振生物醫學晶片用於臨床血液之 新型唐氏症標的蛋白診斷 廖泓舜; 林庭莉; 邱南福; 陳震宇	

