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[C.55] Y. –H. Gao, Y. –H. Jen, and C. –Y. Lo\*, “Advanced capacitive tactile sensor for up-to-sixfold sensitivity enhancement by reduced structural rigidity”, The 31st IEEE International Microprocesses and Nanotechnology Conference (**MNC**), Nov. 16-18, 2018, Sapporo, Japan.

[C.56] Y. –T. Hu, K. –F. Chiu, T. –J. Liu, A. V. Vasenin, and C. –Y. Lo\*, “Isotropic Nanophotonic Modulation with Hybrid Configuration for Surface Plasmon Resonance Application”, The 14th Annual IEEE International Nano/Micro Engineered and Molecular Systems (**IEEE NEMS**), Apr. 11-14, 2019, Bangkok, Thailand.

[C.57] C. –Y. Lo\*, D. Yamane, and K. Masu, “Development of a Highly-Sensitive Flexible Tactile Sensor for Assistance Robots”, The 3rd International Symposium on Biomedical Engineering (**ISBE**), Mar. 8-9, 2019, Tokyo, Japan.

[C.58] K. –F. Chiu, Y. –T. Hu, S. Kumar, and C. –Y. Lo\*, “Advance MEMS-Elastomer Configuration for Enhanced Surface Plasmon Resonance”, The 20th International Conference on Solid-State Sensors, Actuators and Microsystems (**Transducers**), Jun. 24-28, 2019, Berlin, Germany.

[C.59] C. –Y. Lo\*, “Advancements in Polymeric Capacitive Tactile Sensors”, The 20th International Conference on Solid-State Sensors, Actuators and Microsystems (**Transducers**), Jun. 24-28, 2019, Berlin, Germany. Invited.

[C.60] E. R. Cholleti, J. Stringer, C. Bowen, C. –Y. Lo, and K. Aw\*, “Barium Titanate Elastomer composite based capacitive stretch sensor”, International Conference on Advanced Intelligent Mechatronics (**AIM**), Jul. 8-12, 2019, Hong Kong, China.

[C.61] Y. –H. Jen, C. –T. Mo, K. Aw, D. Yamane, and C. –Y. Lo\*, “Extensive Sensitivity Enhancement in Stacked Capacitive Tactile Sensors”, 2019 IEEE Sensors Conference (**IEEE Sensors**), Oct. 27-30, 2019, Montreal, Canada.

[C.62] T. –J. Liu, M. –J. Wu, and C. –Y. Lo\*, “Efficient Evaluation Method for Pattern Transfer Completeness in Printed Electronics”, International Conference on Flexible and Printed Electronics (**ICFPE**), Oct. 23-25, 2019, Taipei, Taiwan.

[C.63] T. –J. Liu, M. –J. Wu, and C. –Y. Lo\*, “Efficient and Errorless Qualification Method for Patterns with Irregular Edges in Printed Electronics”, The 15th Annual IEEE International Nano/Micro Engineered and Molecular Systems (**IEEE NEMS**), Apr. 20-24, 2020, San Diego, U. S. A.

[C.64] D. Yamane and C. –Y. Lo\*, “High-Sensitivity Capacitive Tactile Sensor with Vertically Stacked Hollow Structure”, The 4th International Symposium on Biomedical Engineering (**ISBE**), Mar. 13, 2020, Tokyo, Japan.

[C.65] Y. –H. Jen, C. –T. Mo, Y. –W. Chen, and C. –Y. Lo\*, “Multifunction Force Sensor with Hollow Structure”, IEEE International Conference on Flexible and Printable sensors and systems (**FLEPS**), Aug. 16-18, 2020, Manchester, U. K. (virtual).

[C.66] S. –Y. Ke, Y. –W. Chen, R. Chen, and C. –Y. Lo\*, “Advanced Capacitor Arrangement for Enhanced Spatial Resolution in Tactile Sensors”, IEEE Sensors Conference (**IEEE Sensors**), Oct. 25-28, 2020, Rotterdam, The Netherlands. (virtual).

[C.67] Y. –W. Chen, M. Chandra, and C. –Y. Lo\*, “Numerical Analysis on Detection Tolerances in High Spatial Resolution Capacitive Tactile Sensors”, The 34th IEEE International Conference on Micro Electro Mechanical Systems (**MEMS**), Jan. 25-29, 2021, Munich, Germany (virtual).

[C.68] C. –Y. Lo\*, “Smart Manufacturing that Bridges In-Line AOI Quality and Off-Line EM Characteristics”, International Conference on Smart Sensors (**ICSS**), Oct. 14-15, 2021, Taipei, Taiwan (virtual). Invited.

[C.69] P. P. Pancham, P. Das, S. Mallik, S. S. Mahato, and C. –Y. Lo\*, “InGaN/GaN MQW-Based Insulated Gate Light Emitting Diode for Bias-Dependent Optical Device Applications”, International Conference on Smart Sensors (**ICSS**), Oct. 14-15, 2021, Taipei, Taiwan (virtual).

[C.70] C. –Y. Lo\*, “Wearable Electronic in Niche Market: An Example of Force Sensors for Badminton”, International Conference on Advanced Mechanism and Machine Technology (**iCMMT**), Oct. 29-30, 2021, Hsinchu, Taiwan (virtual). Invited.

[C.71] Y. –J. Zheng, W. –C. Wang, R. Chen, W. –H. Chiu, Y. –Y. Chen, and C. –Y. Lo\*, “Capacitive Pressure Sensing Unit for Racket Sports”, IEEE Sensors Conference (**IEEE Sensors**), Oct. 31-Nov. 4, 2021, Sydney, Australia (virtual).

1. **專利 (Patent)**
2. C. –Y. Lo，Method for Fabricating Right-Angle Holes in a Substrate，美國專利，US7381654B2
3. C. –Y. Lo，MOS Devices with Corner Spacers，美國專利，US7495280B2
4. C. –Y. Lo，MOS Devices with Corner Spacers，美國專利，US7772051B2
5. 羅丞曜，郭勝安，零耗能遙測曲度感測結構及其方法，中華民國專利，發明第I444587號。
6. 王詠辰，陳尊義，陳榮順，羅丞曜，三維觸控單元及三維觸控面板，中華民國專利，發明第I448935號。
7. 羅丞曜，廖冠勛，檢測微區域應力之方法與系統，中華民國專利，發明第I475202號。
8. C. –Y. Lo, S. –A. Kuo, Non-Energy Dissipating, Curvature Sensing Device and Method，美國專利，US8736848B2。
9. 羅丞曜、洪建瑋、陳奕竹，用以實現全彩顯示的畫素、包含其之微機電系統及其製造方法、以及以單一畫素實現全彩顯示的方法，中華民國專利，發明第I561854號。
10. **專書專章 (Book chapter)**

[B.1] 年吉洋、羅丞曜，“ロールtoロール印刷技術によるフレキシブルMEMS型カラーピクセルアレイ”，ロールtoロール技術の最新動向ープロセス最適化への課題と解決策，シーエムシー，2011。  
ISBN: 978-4781303215

[B.2] C. –Y. Lo, “Possibilities for Flexible MEMS: Take Display Systems as Examples” in Microelectromechanical Systems and Devices, InTech, 2012.  
ISBN: 978-9535103066

1. **技術雜誌 (Local journal)**

[M.1] 陳榮順，羅丞曜，陳尊義，王詠辰，“三維影像之實感操作可行性”，第二十九期專題報導，微系統暨奈米科技協會會刊，2013年。

[M.2] 劉廷政、吳孟竹、羅丞曜，“高效率無誤差之微電子產線自動光學檢測手法”，第四四三期專題報導，機械工業雜誌，2020年。

[M.3] 羅丞曜，“The Flexible Printronics Lab”，熱流及航太學門通訊，第四十三期，2021年7月。

1. **國內研討會 (Local conference)**

[L.1] 羅丞曜，“Flexible Material’s Process and Its Optical Application”， 2010年兩岸清華大學能源與奈米科技研討會，2010年10月11～12日，新竹，台灣。

[L.2] 羅丞曜，“In-Line Film Quality Detection for R2R (Ink-Jet) Printing”， 2012年兩岸清華大學能源與奈米科技研討會，2012年10月12-15日，北京，大陸。

[L.3] 羅丞曜，“Flexible Printronics − Process and Application Development”， 2012年兩岸清華大學能源與奈米科技研討會，2012年1月10日，新竹，台灣。

[L.4] 羅丞曜，“Fluidic Simulation and Realization for Inkjet Nano SFIL”， 2012年海峽兩岸尖端奈米材料與元件應用研討會，2012年7月29-30日，新竹，台灣。

[L.5] Cheng-Yao Loand Rongshun Chen，“Polymer-Based Tactile Sensor and Its Capability on Angle Detection”， 2015 KAIST-NTHU Joint Research Workshop，2015年12月16-17日，新竹，台灣。

[L.6] 黃柏欽、羅丞曜，“噴印技術製作之二維圖樣完整性量化機制”，第二十屆奈米工程暨微系統技術研討會，2016年8月25-26日，新竹，台灣。

[L.7] 廖冠勛，羅丞曜，“連續製程軸偏檢測用熱阻式應變規”，第二十一屆奈米工程暨微系統技術研討會，2018年6月1-2日，台北，台灣。

[L.8] 安智豪、廖冠勛、羅丞曜，“以噴墨印刷技術製作之熱阻式應變感測器”，台灣鍍膜科技協會年會，2018年10月12-13日，台北，台灣。

[L.9] 張益瑞、高宇鴻、羅丞曜，“在觸覺感測器中同時改善靈敏度及擴大工作範圍之研究”，中國機械工程學會第三十五屆全國學術研討會，2018年11月30日，嘉義，台灣。

[L.10] Y. –H. Jen, Y. –H. Gao, and C. –Y. Lo，“Low-Rigidity Polydimethylsiloxane and Its Application in Microelectronics”，2019中華民國高分子年會，2019年1月18-19日，台南，台灣。

[L.11] K. –F. Chiu, Y. –T. Hu, and C. –Y. Lo，“Enhancing Color Purity by Enlarging Isotropic Strain Distribution in MEMS-Based SPR”，台灣物理學會年會，2019年1月25-26日，新竹，台灣。

[L.12] 徐紹珉、劉廷政、羅丞曜，“微電子電路圖樣之完整性量化與質化技術”，台灣機電工程國際學會第四屆全國學術研討會，2019年2月15-16日，高雄，台灣。

[L.13] 劉廷政、吳孟竹、Pavel Ianko、羅丞曜，“高效率無誤差之微電子產線自動光學檢測手法”， 2019漢民科技論文競賽，2019年11月28日，新竹，台灣。

[L.14] 邱國峰、羅丞曜，“Enlarging the degree of isotropic of strains for improved color purity in surface plasmon resonance”， Optics & Photonics Taiwan, International Conference (OPTIC)，2019年12月5日，台中，台灣。

[L.15] 任聿浩、磨家佐、羅丞曜，“雙空心疊加型電容式觸覺感測器及其近六百倍之正向力檢測靈敏度改善”，中國機械工程學會108年度年會，2019年12月7日，台北，台灣。

[L.16] 劉廷政、吳孟竹、羅丞曜，“自動光學影像辨識對產線半成品之特性預測技術開發”，台灣機電工程國際學會109年度全國學術研討會，2020年8月28日，台中，台灣。

[L.17] 陳裕文、羅丞曜，“新型熱阻式應變元件及其於卷對卷製造之應用”，第二屆福星熱能創意競賽，2020年8月28日，台中，台灣。

[L.18] 陳裕文、柯詩彧、陳榮順、羅丞曜，“觸覺感測器中提高空間解析度的新型電容陣列配置”，中華民國力學學會年會暨第四十四屆全國力學會議，2020年11月29日，宜蘭，台灣。

[L.19] 吳孟竹、劉廷政、羅丞曜，“AI-Assisted Electromagnetic Characterization for Metal/Epoxy Hybrid Electronics”，中華民國高分子學會年會，2021年7月9日，高雄，台灣。

[L.20] 鄭業瑾、王偉誠、陳羿揚、邱文信、陳榮順、羅丞曜，“穿戴式無線感壓裝置之開發及其於運動科學應用之實證”，中國機械工程學會110年度年會，2021年12月3日，台北，台灣。

1. **獲獎與榮譽 (Award and recognition)**

[A.1] 2011年奈米工程與微系統研究所論文競賽佳作。

[A.2] 2012年奈米工程與微系統研究所論文競賽佳作。

[A.3] **Article of particular interest** on “Post-Lithography Pattern Modification and Its Application to a Tunable Wire Grid Polarizer” in *Nanotechnology* [J.11].

[A.4] **Best Student Presentation Award** (title “VIS Anti-reflection Nanostructure Film by Using Roll-to-Roll UV-Nanoimprint Technology” ([C.28]) in The 12th International Conference on Nanoimprint and Nanoprint Technology (NNT 2013).

[A.5] The **Best Conference Paper Award** (title “Morphology and Conductivity Enhancement of Metal Mesh in OLEDs by Near Infrared and Intense Pulse Light” [C.46]) in The 12th Annual IEEE International Conference on Nano/Micro Engineered and Molecular Systems (NEMS 2017).

[A.6] 2018年台灣鍍膜科技協會年會口頭發表競賽佳作([L.8])。

[A.7] 2018年(106學年度)科技部工程司自動化學門成果發表會最佳海報獎。

[A.8] 2019年中華民國高分子學會年會海報發表競賽佳作([L.10])。

[A.9] 2019年台灣物理年會海報發表競賽佳作([L.11])。

[A.10] 台灣機電工程國際學會108年度全國學術研討會口頭發表**分組第一名**([L.12])。

[A.11] **Most Impressive Poster** (title: “Advanced capacitive tactile sensor for up-to-sixfold sensitivity enhancement by reduced structural rigidity” [C.53]) in The 31st IEEE International Microprocesses and Nanotechnology Conference.

[A.12] The Best Conference Paper Award Finalist (title “Isotropic Nanophotonic Modulation with Hybrid Configuration for Surface Plasmon Resonance Application” [C.54]) in The 14th Annual IEEE International Conference on Nano/Micro Engineered and Molecular Systems.

[A.13] 2019年安智豪同學獲選中華民國斐陶斐榮譽學會碩士班會員。

[A.14] 2019年(107學年度)科技部工程司自動化學門成果發表會海報展特優獎。

[A.15] 2019**漢民科技論文競賽金獎**([L.13])。

[A.16] Student Paper Award ([L.14]) in OPTIC 2019 Conference.

[A.17] 中國機械工程學會108年度年會之口頭發表競賽佳作([L.15])。

[A.18] 台灣機電工程國際學會109年度全國學術研討會口頭發表**分組第一名**([L.16])。

[A.19] 第二屆**福星熱能創意競賽第三名**(智能感測器類) ([L.17])。

[A.20] 中華民國力學學會109年度**年輕力學學者獎**。

[A.21] Elevated to **IEEE Senior Member** in 2020.

[A.22] 中國機械工程學會110年度年會之口頭發表競賽**第三名** ([L.20])。

[A.23] 澄德科技教育基金會2021大專校院機電暨智慧創意實作競賽佳作。

[A.24] 2021年(109學年度)科技部工程司自動化學門成果發表會計畫成果競賽優良獎。

[A.25] 清華大學工學院院級教學優良教師。