1. **國際期刊論文 (International journal)**

[J.1] C. –Y. Lo, C. –L. Hsu, Q. –X. Yu, H. –Y. Lee, and C. –T. Lee\*, “Investigation of Transparent and Conductive Undoped Zn2In2O5-x Films Deposited on n-Type GaN Layers”, ***Journal of Applied Physics***, Vol. 92, 274-280 (2002).

[J.2] C. –Y. Lo, Y. –C. Peng, Y. –M. Chen, G. C. Tu, S. –S. Lin, and W. –M. Chen\*, “Reverse CoSi2 Thermal Stability and Digitized Sheet Resistance Increase of Sub-90nm Polysilicon Lines”, ***Japanese Journal of Applied Physics***, Vol. 44, 2217-2220 (2005).

[J.3] Y. –M. Chen, G. C. Tu, Y. –L. Wang, G. –J. Hwang, and C. –Y. Lo\*, “CoSix Thermal Stability on Narrow-Width Polysilicon Resistors”, ***Journal of Vacuum Science and Technology B***, Vol. 24, 83-86 (2006).

[J.4] C. –Y. Lo\*, H. Fujita, and H. Toshiyoshi, “Toward Realization of Transmissive Display by MEMS Etalon”, ***IEICE Electronics Express***, Vol. 5, No. 9, 326-331 (2008).

[J.5] C. –Y. Lo\*, J. Hiitola-Keinanen, O. –H. Huttunen, J. Petaja, J. Hast, A. Maaninen, H. Kopola, H. Fujita, and H. Toshiyoshi, “Novel Roll-to-Roll Lift-Off Patterned Active-Matrix Display on Flexible Polymer Substrate”, ***Microelectronic Engineering***, Vol. 86, 979-983 (2009).

[J.6] C. –Y. Lo\*, J. Hiitola-Keinanen, O. –H. Huttunen, J. Petaja, J. Hast, A. Maaninen, H. Kopola, H. Fujita, and H. Toshiyoshi, “Micro Roll-to-Roll Patterning Process and Its Application on Flexible Display”, ***Japanese Journal of Applied Physics***, Vol. 48, 06FC04 (2009).

[J.7] C. –Y. Lo\*, O. -H. Huttunen, J. Hiitola-Keinanen, J. Petaja, H. Fujita, and H. Toshiyoshi, “MEMS-Controlled Paper-Like Transmissive Flexible Display”, ***Journal of Microelectromechanical Systems***, Vol.19, 410-418 (2010).

[J.8] C. –Y. Lo\*, Y. –R. Huang, K. –H. Liao, S. –A. Kuo, and S. –P. Wei, “Optimization of Plasma Preparation on Polymeric Substrate for Embedded Flexible Electronic Applications”, ***Microelectronic Engineering***, Vol. 88, 2657-2661 (2011).

[J.9] C. –Y. Lo\*, Y. –R. Huang, K. –H. Liao, S. –A. Kuo, and S. –P. Wei, “Zero Power Consumption Visual Curvature Sensor by Flexible Interferometer”, ***Sensors and Actuators A: Physical***, Vol. 169, 295-300 (2011).

[J.10] Y. –R. Huang, S. –A. Kuo, M. Stach, C. –H. Liu, K. –H. Liao, and C. –Y. Lo\*, “A High Sensitivity Three-Dimensional-Shape Sensing Patch Prepared by Lithography and Inkjet Printing”, ***Sensors***, Vol. 12, 4172-4186 (2012).

[J.11] M. Stach, E. –C. Chang, C. –Y. Yang, and C. –Y. Lo\*, “Post-Lithography Pattern Modification and Its Application to a Tunable Wire Grid Polarizer”, ***Nanotechnology***, Vol. 24, 115306 (2013).

[J.12] Y. –C. Wang, T. –Y. Chen, R. Chen, and C. –Y. Lo\*, “Mutual Capacitive Flexible Tactile Sensor for 3-D Image Control”, ***Journal of Microelectromechanical Systems***, Vol. 22, 804-814 (2013).

[J.13] C. –H. Liu, C. –K. Sung\*, E. –C. Chang, C. –Y. Lo, C. –C. Fu, “Fabricating a Silver Soft Mold on a Flexible Substrate for Roll-to-Roll Nanoimprinting”, ***IEEE Transactions on Nanotechnology***, Vol. 13, 80-84 (2014).

[J.14] T. –Y. Chen, Y. –C. Wang, C. –Y. Lo, and R. Chen\*, “Friction-Assisted Pulling Force Detection Mechanism for Tactile Sensors”, ***Journal of Microelectromechanical Systems***, Vol. 23, 471-481 (2014).

[J.15] K. –H. Liao and C. –Y. Lo\*, “Thermoresistive Strain Sensor and Positioning Method for Roll-to-Roll Process”, ***Sensors***, Vol. 14, 8082-8095 (2014).

[J.16] E. –C. Chang, M. Stach, C. –Y. Yang, C. –C. Fu, and C. –Y. Lo\*, “Enlarging a Post-Lithography Pattern Modification Process Window with a Poisson’s Ratio-Matching Inter-Layer”, ***Microelectronic Engineering***, Vol. 127, 97-101 (2014).

[J.17] J. –W. Hong, C. –Y. Yang, and C. –Y. Lo\*, “Critical Dimension and Pattern Size Enhancement Using Pre-Strained Lithography”, ***Applied Physics Letters***, Vol. 105, 154103 (2014).

[J.18] S. –F. Lin, C. –H. Chen\*, and C. –Y. Lo, “Near-Infrared Imaging System for Nondestructive Inspection of Micro-Crack in Wafer Through Dicing Tape”, ***Applied Optics***, Vol. 54, E123-E128 (2015).

[J.19] B. –C. Huang, H. –J. Chan, J. –W. Hong, and C. –Y. Lo\*, “Methodology for Evaluating Pattern Transfer Completeness in Inkjet Printing with Irregular Edges”, ***Journal of Micromechanics and Microengineering***, Vol. 26, 065009 (2016).

[J.20] Y. –C. Chung, S. –T. Chuang, T. –Y. Chen, C. –Y. Lo, and R. Chen\*, “Capacitive Tactile Sensor for Angle Detection and Its Accuracy Study”, ***IEEE Sensors Journal***, Vol. 16, 6857-6865 (2016).

[J.21] S. –T. Chuang, M. Chandra, R. Chen, and C. –Y. Lo\*, “Capacitive Tactile Sensor with Asymmetric Electrode for Angle-Detection-Error Alleviation”, ***Sensors and Actuators A: Physical***, Vol. 250, 159-169 (2016).

[J.22] B. –C. Huang, J. –W. Hong, and C. –Y. Lo\*, “Mechanical Stress-Controlled Tunable Active Frequency-Selective Surface”, ***Applied Physics Letters***, Vol. 110, 044101 (2017).

[J.23] C. –Y. Lin, L. –W. Wang, K. –H. Liao, and C. –Y. Lo\*, “Structure Compensation and Illumination Uniformity Improvement Through Inkjet Printing in Organic Light-Emitting Diode Subpixels”, ***Journal of Vacuum Science & Technology B***, Vol. 35, 020601 (2017).

[J.24] H. –J. Chan, B. –C. Huang, L. –W. Wang, K. –H. Liao, and C. –Y. Lo\*, “Porosity Reduction in Inkjet-Printed Copper Film by Progressive Sintering on Nanoparticles”, ***Thin Solid Films***, Vol. 627, 33-38 (2017).

[J.25] M. Chandra, S. –Y. Ke, R. Chen, and C. –Y. Lo\*, “Vertically Stacked Capacitive Tactile Sensor with More Than Quadrupled Spatial Resolution Enhancement from Planar Arrangement”, ***Sensors and Actuators A: Physical***, Vol. 263, 386-390 (2017).

[J.26] M. Chandra, S. –Y. Ke, R. Chen, and C. –Y. Lo\*, “Doubling the Spatial Resolution in Tactile Sensors”, ***Journal of Micro/Nanolithography, MEMS, and MOEMS***, Vol. 16, 035001 (2017).

[J.27] L. –W. Wang and C. –Y. Lo\*, “Morphology and Conductivity Improvement of Metal Mesh Through Roll-to-Roll-Compatible Near-Infrared Sintering”, ***Micro & Nano Letters***, Vol. 12, 886-890 (2017).

[J.28] B. –C. Huang and C. –Y. Lo\*, “Inkjet-Patterned Porous Split-Ring Resonator and Its Performance Study on Metamaterial Application”, ***Journal of Micromechanical and Microengineering***, Vol. 28, 095012 (2018).

[J.29] S. –C. Lo, Y. –T. Hu, C. –L. Pan, and C. –Y. Lo\*, “Numerical Analysis of a Microelectromechanical System-Based Color Filtering Device with Surface Plasmon Resonance Modulation”, ***Displays***, Vol. 54, 20-27 (2018).

[J.30] S. –M. Hsu and C. –Y. Lo\*, “Advanced Qualification Method for Patterns with Irregular Edges in Printed Electronics”, ***Flexible and Printed Electronics***, Vol. 4, 015001 (2019).

[J.31] Y. –T. Hu, Y. –C. Chen, A. V. Vasenin, M. Florianová, K. –F. Chiu, C. –L. Pan, and C. –Y. Lo\*, “An Integrated Evaluation Method Based on Energy Concentration for Evaluating Normally Distributed Spectra in the Visible Region”, ***Displays***, Vol. 57, 7-17 (2019).

[J.32] K. –H. Liao, C. –H. An, and C. –Y. Lo\*, “Continuous Inkjet-Patterned and Flashlight-Sintered Strain Sensor for In-Line Off-Axis Detection in Roll-to-Roll Manufacturing”, ***Mechatronics***, Vol. 59, 95-103 (2019).

[J.33] Y. –H. Gao, Y. –H. Jen, R. Chen, K. Aw, D. Yamane, and C. –Y. Lo\*, “Five-Fold Sensitivity Enhancement in a Capacitive Tactile Sensor by Reducing Material and Structural Rigidity”, ***Sensors and Actuators A: Physical***, Vol. 293, 167-177 (2019).

[J. 34] C. –C. Huang, S. Gupta, C. –Y. Lo, and N. –H. Tai\*, “Highly Transparent and Excellent Electromagnetic Interference Shielding Films Composed of Silver-Grid”, ***Materials Letters***, Vol. 253, 152-155 (2019).

[J. 35] Y. –T. Hu, K. –F. Chiu, A. V. Vasenin, M. Florianová, and C. –Y. Lo\*, “Surface Plasmon Resonance Manipulation Through Application of Mechanically Generated Planar and Linear Strain”, ***Applied Physics Express***, Vol. 12, 096504 (2019).

[J. 36] C. –H. An, K. –H. Liao, and C. –Y. Lo\*, “Strain Sensor with Low Thermal Conductivity Concealing Resin for Enhanced Detection Sensitivity and Improved Spatial Resolution”, ***Journal of Micromechanics and Microengineering***, Vol. 29, 124001 (2019).

[J. 37] T. –J. Liu, S. –M. Hsu, M. –J. Wu, P. Ianko, and C. –Y. Lo\*, “Efficient and Improved Qualification Method for Patterns with Irregular Edges in Printed Electronics”, ***Journal of Micromechanics and Microengineering***, Vol. 29, 124005 (2019).

[J. 38]K. –F. Chiu, S. Kumar, Y. –W. Chen, and C. –Y. Lo\*, “Linear Strain Maximization in MEMS-Elastomer Hybrid Configurations for Isotropic Electromagnetic Modulations in Stretchable Electronics”, ***Displays***, Vol. 64, 101963 (2020).

[J. 39] K. Yellapantula, H. Devaraj, M. Assadian, L. Stuart, C. –Y. Lo, W. C. Gan, and K. Aw\*, “Soft and Flexible Sensor Array Using Carbon Black Pillars for Object Recognition via Pressure Mapping”, ***Measurement***, Vol. 159, 107781 (2020).

[J. 40] H. Devaraj, R. Schober, M. Picard, M. Y. Teo, C. –Y.o Lo, W. C. Gan, K. C. Aw\*, “Highly Elastic and Flexible Multi-Layered Carbon Black/Elastomer Composite Based Capacitive Sensor Arrays for Soft Robotics”, ***Measurement: Sensors***, Vol. 2-4, 100004 (2020).

[J. 41] Y. –R. Zhang, Y. –H. Jen, C. –Y. Mo, Y. –W. Chen, M. Al-Romaithy, E. Martincic, and C. –Y.o Lo\*, “Realization of Multistage Detection Sensitivity and Dynamic Range in Capacitive Tactile Sensors”, ***IEEE Sensors Journal***, Vol. 20, 9724-9732 (2020).

[J. 42] Y. –H. Jen, C. –T. Mo, Y. –W. Chen, E. Martincic, D. Yamane, T. –F. M. Chang , M. Sone, and C. –Y. Lo\*, “Development and Characterization of Vertically Stacked Tactile Sensor with Hollow Structure”, ***IEEE Sensors Journal***, Vol. 21, 5809-5818 (2021).

[J.43] T. –J. Liu, M. –J. Wu, and C. –Y. Lo\*, “Machine Learning-Based Off-Line Electrical Characteristic Prediction Through In-Line Pattern Integrity Inspection”, ***Journal of Micromechanics and Microengineering***, Vol. 31, 015005 (2021).

[J.44] S. –Y. Ke, Y. –W. Chen, and C. –Y. Lo\*, “Novel Response Acquisition Method for Enhancing Spatial Resolution in Capacitive Tactile Sensing Array”, ***IEEE Sensors Journal***, Vol. 21, 5895-5903 (2021).

[J.45] Y. –W. Chen, M. Chandra, and C. –Y. Lo\*, “Calibrations on Shear Angle Detections in Vertically Stacked Capacitive Tactile Sensors”, *IEEE Sensors Journal*, Under revision (submission ID Sensors-37594-2020).

[J.46] E. –C. Yang, Y. –W. Chen, J. –Y. Wu, R. Chen, and C. –Y. Lo\*, “Ultimate Design Solution on Enhancing Detection Sensitivity in Tactile Sensors”, *IEEE Sensors Journal*, Under review (submission ID Sensors-38728-2021).

1. **國際研討會論文 (International conference)**

[C.1] C. –Y. Lo\*, S. –S. Lin, W. –M. Chen, and Y. –J. Mii, “A test structure to verify the robustness of silicided N+/P+ interface”, IEEE 2004 International Conference on Microelectronic Test Structures (ICMTS), Mar. 22-25, 2004, Awaji, Japan.

[C.2] H. Toshiyoshi\*, C. –Y. Lo, Y. Taii, and H. Fujita, “MEMS Fabry-Perot Pixels”, The 20th Annnual Meeting of the IEEE/LEOS, Oct. 21-25, 2007, Lake Buena Vista (Florida), U. S. A.

[C.3] C. –Y. Lo\*, O. –H. Huttunen, J. Petäjä, J. Hast, A. Maaninen, H. Kopola, H. Fujita, and H. Toshiyoshi, “Capability of Realization of Roll-to-Roll Printed MEMS Fabry-Perot Display Pixels”, The 2nd Student Conference of Printing Future Days, Nov. 5-8, 2007, Chemnitz, Germany.

[C.4] C. –Y. Lo\*, O. –H. Huttunen, J. Petäjä, J. Hast, A. Maaninen, H. Kopola, H. Fujita, and H. Toshiyoshi, “Novel Printing Processes for MEMS Fabry-Perot Display Pixel”, The 14th International Display Workshop (**IDW**), Dec. 5-7, 2007, Sapporo, Japan.

[C.5] C. –Y. Lo\*, O. –H. Huttunen, J. Petäjä, J. Hiitola-Keinanen, J. Hast, A. Maaninen, H. Kopola, H. Fujita, and H. Toshiyoshi, “Substrate design concerns for printed flexible displays”, The 1st International Conference on R2R Printed Electronics, Apr. 30-May 2, Seoul, Korea (2008).

[C.6] J. Hast\*, C. –Y. Lo, O. –H. Huttunen, J. Hiitola-Keinanen, J. Petäjä, H. Toshiyoshi, H. Kopola, A. Maaninen, and H. Fujita, “Towards roll-to-roll manufactured flexible, large area, and low cost MEMS display”, The 9th Optics Days 2008, (2008).

[C.7] C. –Y. Lo\*, J, Hast, O. –H. Huttunen, J. Petäjä, J. Hiitola-Keinänen, A. Maaninen, H. Kopola, H. Fujita, and H. Toshiyoshi, “Low Operation Voltage Non Self-Emissive MEMS Color Filter Pixels”, IEEE Optical MEMS and Nanophotonics (**OMN**), Aug. 11-14, 2008, Freiburg, Germany.

[C.8] C. –Y. Lo\*, J. Hiitola-Keinanen, O. –H. Huttunen, J. Petaja, J. Hast, A. Maaninen, H. Kopola, H. Fujita, and H. Toshiyoshi, “Micro Roll-to-Roll Lift-Off Patterning Process and Its Application on Flexible Display”, 21st International Microprocesses and Nanotechnology Conference (**MNC**), Oct. 27-30, 2008, Fukuoka, Japan.

[C.9] C. –Y. Lo\*, O. –H. Huttunen, J. Hiitola-Keinanen, J. Petaja, J. Hast, A. Maaninen, H. Kopola, H. Fujita, H. Toshiyoshi, “Active Matrix Flexible Display Array Fabricated by MEMS Printing Techniques”, The 15th International Display Workshop (**IDW**), Dec. 9-11, 2015, Niigata, Japan.

1. C. –Y. Lo\* and H. Toshiyoshi, “Low-Cost Visual Curvature Sensor by Interferometer”, 5th Asia-Pacific Conference on Transducers and Micro-Nano Technology (**APCOT**), Jul. 6-9, 2010, Perth, Australia.
2. T. Tortissier, C. –Y. Lo\*, and H. Toshiyoshi, “Flexible Display System Based on MEMS Fabry-Perot Interferometer”, in Proc. Optical MEMS and Nanophotonics 2010 (**OMN**), Aug. 9-12, 2010, Sapporo, Japan.
3. C. –Y. Lo\* and Y. –R. Huang, “ICP-RIE Etching Process Optimization for Embedded Flexible Electronics Applications”, 36th International Conference on Micro and Nano Engineering (**MNE**), Sep. 19-22, 2010, Genoa, Italy.
4. T. –Y. Chen, Y. –C. Wang, R. Chen, and C. –Y. Lo\*, “Simultaneous Normal and Shear Force Sensor for Flexible and Transparent Display Applications”, 49th Society for Information Display's Display Week 2011 (**SID**), May 15-20, 2011, Los Angeles, U. S. A.
5. T. –Y. Chen, Y. –C. Wang, C. –Y. Lo, and R. Chen\*, “A Novel Integrated Transparent Flexible Tactile Sensor”, The 16th International Conference on Solid-State Sensors, Actuators and Microsystems (**Transducers**), Jun. 5-9, 2011, Beijing, China.
6. C. –H. Liu, C. –L. Wu, P. –L. Niu, C. –K. Sung, and C. –Y. Lo\*, “Inkjet Printing of UV Resist Layer for Nanoimprint on Flexible Substrates”, International Conference on Materials for Advanced Technologies (**ICMAT**), Jun. 26 –Jul. 1, 2011, Singapore.
7. C. –H. Liu, S. –A. Kuo, C. –Y. Lo\*, and C. –K. Sung, “Optimized Inkjet Printed UV Resin for Sub-100 nm Nanoimprint”, 37th International Conference on Micro and Nano Engineering (**MNE**), Sep 19-23, 2011, Berlin, Germany.
8. S. –A. Kuo, G. –H. Lu, and C. –Y. Lo\*, “Inkjet Printed Polymer Micro Rivet”, 24th International Microprocesses and Nanotechnology Conference (**MNC**), Oct. 24-27, 2011, Kyoto, Japan.
9. Y. –C. Chung, C. –Y. Lo, and R. Chen\*, “Flexible Capacitance Tactile Sensor for Precise Shear Force Detection”, The 6th Asia-Pacific Conference on Transducers and Micro/Nano Technologies (**APCOT**), Jul. 8-11, 2012, Nanjing, China.
10. K. –H. Liao and C. –Y. Lo\*, “Verisimilitude Reliability Test System for Flexible MEMS Deformation Sensor”, The 6th Asia-Pacific Conference on Transducers and Micro/Nano Technologies (**APCOT**), Jul. 8-11, 2012, Nanjing, China.
11. M. Stach, P. –H. Yao, C. –H. Chen, and C. –Y. Lo\*, “Tunable Nano Wire-Grid Polarizer by Straining Substrate”, IEEE 12th International Conference on Nanotechnology (**IEEE Nano**), Aug. 20-23, 2012, Birmingham, U. K.
12. C. –H. Liu, C. –K. Sung, and C. –Y. Lo\*, “Fluidic Simulation and Realization for Inkjet Nano SFIL”, IEEE 12th International Conference on Nanotechnology (**IEEE Nano**), Aug. 20-23, 2012, Birmingham, U. K.
13. M. Stach and C. –Y. Lo\*, “Stretched Nano-Scale Flexible Wire-Grid Polarizer”, 2012 International Conference on Flexible and Printed Electronics (**ICFPE**), Sep. 5-8, 2012, Tokyo, Japan.
14. Y. –R. Huang, C. –Y. Yang, K. –H. Liao, and C. –Y. Lo\*, “Substrate Bonding Enhancement by Micro Zipper Structure”, 38th International Micro & Nano Engineering Conference (**MNE**), Sep. 16-20, 2012, Toulouse, France.
15. C. –H. Liu, C. –Y. Lo, C. –Y. Hung, C. –K. Sung\*, and C. –C. Wu, “Anti-reflection nanostructure film by roll-to-roll nanoimprint technology”,38th International Micro & Nano Engineering Conference (**MNE**), Sep. 16-20, 2012, Toulouse, France.
16. T. –Y. Chen, Y. –C. Wang, C. –Y. Lo, and R. Chen\*, “Pulling Force Sensing Unit for 3D Image Movement”, 51st Society for Information Display's Display Week 2013 (**SID**), May 19-24, 2013, Vancouver, Canada.
17. T. –Y. Chen, Y. –C. Wang, C. –Y. Lo, and R. Chen\*, “Fingertip-Controllable Pulling Force Sensor”, The 18th International Conference on Solid-State Sensors, Actuators and Microsystems (**Transducers**), Jun. 16-20, 2013, Barcelona, Spain.
18. L. –Y. Wang and C. –Y. Lo\*, “Inkjet Printed Strain Gauge and Its Defect Positioning Study”, The International Conference on Flexible and Printed Electronics (**ICFPE**), Sep. 11-13, 2013, Jeju, Korea.
19. C. –H. Liu, C. –K. Sung\*, and C. –Y. Lo, “VIS Anti-reflection Nanostructure Film by Using Roll-to-Roll UV-Nanoimprint Technology”, The 12th International Conference on Nanoimprint and Nanoprint Technology (**NNT**), Oct. 21-23, 2013, Barcelona, Spain.
20. C. –Y. Yang, J. –W. Hong, C. –Y. Lin, and C. –Y. Lo\*, “Novel Shrink Lithography by External Stress Orthogonal to the Critical Dimension”, The 9th IEEE International Conference on Nano/Micro Engineered and Molecular Systems (**IEEE NEMS**), Apr. 13-16, 2014, Honolulu, U. S. A.
21. M. Stach and C. –Y. Lo\*, “Nano Metal Crack Initiation on Polymer and its Optical Application with Tunable Metal Dimensions”, The 14th International Conference on Nanotechnology (**IEEE Nano**), Aug. 18-21, 2014, Toronto, Canada.
22. H. –J. Chan, C. –C. Chen, J. –W. Hong, C. –Y. Lo\*, “Pattern Integrity Judgment Methodology for Inkjet Printed Electronics”, The 40th International Conference on Micro and Nano Engineering (**MNE**), Sep. 22-26, 2014, Lausanne, Switzerland.
23. Y. –C. Chung, T. –Y. Chen, C. –Y. Lo, and R. Chen\*, “Micro Angle Detection Sensor for Smart Phone Backside Control Unit”, The 40th International Conference on Micro and Nano Engineering (**MNE**), Sep. 22-26, 2014, Lausanne, Switzerland.
24. J. –W. Hong, C. –Y. Lin, C. –Y. Yang, and C. –Y. Lo\*, “Anisotropic and Isotropic Strain Photolithography”, The 5th International Conference on Flexible and Printed Electronics (**ICFPE**), Oct. 21-23, 2014, Beijing, China.
25. C. –H. Liu, C. –K. Sung, and C. –Y. Lo\*, “Development of Anti-infrared Moth-eye Nanostructure by Using Roll-to-Roll Technology”, The 27thInternational Microprocesses and Nanotechnology Conference (**MNC**), Nov.4-7, 2014, Fukuoka, Japan.
26. S. –T. Chuang, T. –Y. Chen, Y. –C. Chung, R. Chen, and C. –Y. Lo\*, “Asymmetric Fan Shape Electrode for High Angle Detection Accuracy Tactile Sensor”, The 28th IEEE International Conference on Micro Electro Mechanical Systems (**MEMS**), Jan. 18-22, 2015, Estoril, Portugal.

[C.36] B. –C. Huang, H. –J. Chan, J. –W. Hong, and C. –Y. Lo\*, “Pattern Perfection Evaluation Methodology for Inkjet Printed Circuits”, The 41st International Conference on Micro and Nano Engineering (**MNE**), Sep. 21-27, 2015, Hague, The Netherlands.

[C.37] H. –J. Chan, B. –C. Huang, and C. –Y. Lo\*, “Low-Temperature Progressive Sintering for Inkjet-Printed Copper Nanoparticles”, International Conference on Flexible and Printed Electronics (**ICFPE**), Oct. 21-23, 2015, Taipei, Taiwan.

[C.38] M. Chandra, R. Chen, and C. –Y. Lo\*, “Universal Double-Spatial-Resolution Solution for Capacitive Tactile Sensors”, IEEE Sensors Conference (**IEEE Sensors**), Nov. 1-4, 2015, Busan, Korea.

[C.39] C. –Y. Lin and C. –Y. Lo\*, “OLED Dry-Film Uniformity Compensation by Inkjet Wet-Process”, International Display Workshop (**IDW**), Dec. 9-11, 2015, Otsu, Japan.

[C.40] M. Chandra, D. –J. Yao, R. Chen, and C. –Y. Lo\*, “Spatial Resolution Maximization for Capacitive Tactile Sensors”, The 29th IEEE International Conference on Micro Electro Mechanical Systems (**MEMS**), Jan. 24-28, 2016, Shanghai, China.

[C.41] C. –Y. Lin, L. –W. Wang, and C. –Y. Lo\*, “Morphology and Intensity Uniformity Compensation in OLED by Inkjet Printing”, The International Conference on Flexible and Printed Electronics (**ICFPE**), Sep. 5-8, 2016, Yamagata, Japan.

[C.42] B. –C. Huang and C. –Y. Lo \*, “Line Edge Roughness Evaluation on Patterns with Serrated Curvatures”, The 42nd International Conference on Micro and Nano Engineering (**MNE**), Sep. 19-23, 2016, Vienna, Austria.

[C.43] C. –Y. Lin, L. –W. Wang, and C. –Y. Lo\*, “OLED Dry-Film Morphology Compensation and Evaluation”, The 42nd International Conference on Micro and Nano Engineering (**MNE**), Sep. 19-23, 2016, Vienna, Austria.

[C.44] M. Chandra, R. Chen, and C. –Y. Lo\*, “Fourfold Spatial Resolution Realization in Capacitive Tactile Sensors”, IEEE Sensors Conference (**IEEE Sensors**), Oct 30. - Nov. 2, 2016, Orlando, U. S. A.

[C.45] D. Yamane, K. Masu, and C. –Y. Lo\*, “Development of a Highly-Sensitive Flexible Tactile Sensor for Assistance Robots”, The 1st International Symposium on Biomedical Engineering (**ISBE**), Mar. 23-24, 2017, Tokyo, Japan

[C.46] L. –W. Wang and C. –Y. Lo\*, “Morphology and Conductivity Enhancement of Metal Mesh in OLEDs by Near Infrared and Intense Pulse Light”, The 12th Annual IEEE International Nano/Micro Engineered and Molecular Systems (**IEEE NEMS**), Apr. 9-12, 2017, Los Angeles, U. S. A.

[C.47] M. Chandra, R. Chen, and C. –Y. Lo\*, “Capacitive Tactile Sensor for Quadrupled Spatial Resolution”, The 20th International Conference on Solid-State Sensors, Actuators and Microsystems (**Transducers**), Jun. 18-22, 2017, Kaohsiung, Taiwan.

[C.48] S. –C. Lo, Y. –T. Hu, Y. –C. Chen, and C. –Y. Lo\*, “Isotropically Tunable MEMS Color Filter by Surface Plasmon Resonance”, The 20th International Conference on Solid-State Sensors, Actuators and Microsystems (**Transducers**), Jun. 18-22, 2017, Kaohsiung, Taiwan.

[C.49] S. –C. Lo, Y. –T. Hu, C. –L. Pan, and C. –Y. Lo\*, “Strain Engineering in Silicon-Elastomer Hybrid Microelectromechanical System”, The 43rd International Conference on Micro and Nano Engineering (**MNE**), Sep. 18-22, 2017, Braga, Portugal.

[C.50] C. –Y. Lo\*, D. Yamane, and K. Masu, “Force Response and Vibration Characteristics of Flexible Capacitive Sensors”, The 2nd International Symposium on Biomedical Engineering (**ISBE**), Nov. 9-10, 2017, Tokyo, Japan

[C.51] Y. –T. Hu, S. –C. Lo, Y. –C. Chen, C. –L. Pan, and C. –Y. Lo\*, “Surface Plasmonic Resonance Modulation by MEMS-Elastomer Hybrid System”, The 31st IEEE International Conference on Micro Electro Mechanical Systems (**MEMS**), Jan. 21-25, 2018, Belfast, U. K.

[C.52] C. –H. An, K. –H. Liao, and C. –Y. Lo\*, “Sensitivity enhancement in thermoresisitive strain sensor by inkjet-printed concealing layer”, The 31st IEEE International Microprocesses and Nanotechnology Conference (**MNC**), Nov. 16-18, 2018, Sapporo, Japan.

[C.53] 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.54] 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.55] 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.56] 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.57] 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.

[C.58] 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.59] 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.60] 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.61] 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.62] 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.63] 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.64] 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.65] 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.66] P. Pancham and C. –Y. Lo\*, “Strain Sensor based on Elastic Silicone”, The 20th International Conference on Solid-State Sensors, Actuators and Microsystems (**Transducers**), Jun. 20-25, 2021, Orlando, U. S. A. (submitted).

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。

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] 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，高雄，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.