

## 呂濟宇資料表

姓名：呂濟宇 (Lu Chi-Yu)

聯絡地址：80708 高雄醫學大學醫學系生化學科

聯絡電話：(07)3121101 轉 2137-499

傳真號碼：07-3223075

電子信箱：cylu@kmu.edu.tw

### 現職

高雄醫學大學/醫學系生物化學科/教授 (2015 ~ 迄今)

中山大學醫學科技研究所合聘教師 (2014 ~ 迄今)

衛生福利部食品藥物管理署評選委員 (2017 ~ 迄今)

衛生福利部食品藥物管理署諮議小組委員 (2020 ~ 2023)

台灣蛋白質學會理事 (2014 ~ 2020)

### 專長與研究領域

質譜儀生醫分析技術、蛋白質體學、代謝體學、分子及細胞生物診斷、綠色生醫檢測技術、微小化分離技術、藥物微量分析、生物標記找尋、胜肽及螢光探針設計、蛋白質分析及生物樣品檢測技術開發等。

### 專利：類別代碼：(A)發明專利(B)新型專利(C)新式樣專利。

類別	專利名稱	國別	專利號碼
(A)	對羥基苯甲酸酯之檢測方法	中華民國	I479149
(A)	乙琥胺檢測方法	中華民國	I518322
(A)	丙戊酸及其代謝物的量測方法及其系統	中華民國	I532992
(A)	西他列汀檢測方法	中華民國	I532993
(A)	用以評估自由基產生能力的寡肽及方法	中華民國	I568746
(A)	METHOD FOR MONITORING LEVEL OF PARABEN IN COSMETICS	美國	US9715998B2
(A)	二甲雙胍檢測方法	中華民國	I603084
(A)	非類固醇抗發炎藥物的檢測方法	中華民國	I627406
(A)	用以檢測丙烯醯胺的寡肽、套組及方法	中華民國	I693402
(A)	用以檢測布洛芬之鏡像異構物的套組及方法	中華民國	I715968
(A)	用以檢測甲醛寡肽、套組及方法	中華民國	I727640
(A)	用以檢測反式脂肪酸的套組及方法	中華民國	I823798

### SCI Paper (2010 ~)

1. Y. S. Li, W. L. Tseng and C. Y. Lu\*, Determination of Metformin from Micro-liter Plasma and

- Blood Glucose Test Strip Using Eco-friendly Micro-extraction Procedures for Point-of-care Diagnostics. *Microchem. J.* 2024, 205, 111343.
2. W. B. Tseng, M. J. Wu, C. Y. Lu, A. S. K. Kumar and W. L. Tseng\*, Aptamer-Based Flares Hybridized with Single-Stranded DNA-Conjugated MoS<sub>2</sub> Nanosheets for Ratiometric Fluorescence Sensing and Imaging of Potassium Ions and Adenosine Triphosphate in Human Fluids and Living Cells. *Spectrochim Acta A Mol Biomol Spectrosc.* 2024, 309, 123781.
  3. Y. S. Pu, C. Y. Huang, H. L. Wu, J. H. Wu, Y. F. Su, C. R. Yu, C. Y. Lu, W. J. Wu, S. P. Huang, Y. T. Huang and T. C. Hour\*, EGFR-Mediated Hyperacetylation of Tubulin Induced Docetaxel Resistance by Downregulation of HDAC6 and Upregulation of MCAK and PLK1 in Prostate Cancer Cells. *Kaohsiung J. Med. Sci.* 2024, 40, 23-34.
  4. C. Y. Li, Y. C. Wu, F. R. Chang, M. El-Shazly, Y. C. Du, C. Y. Lu, T. H. Duh and T. Y. Wu\*, Application of Response Surface Methodology and Quantitative NMR for the Optimum Extraction, Characterization, and Quantitation of *Antrodia cinnamomea* Triterpenoids, *Sci Rep.* 2023, 13, 20265.
  5. H. S. Ho and C. Y. Lu\*, Simple and Fast Microderivatization Method for Determining Formaldehyde Using Narrow-Bore Liquid Chromatography with UV Detection, *Anal. Methods* 2023, 15, 5095-5101.
  6. Determination of Formaldehyde in the Daily Living Environment Using Membrane-Enhanced Water Plug Coupled Extraction Following Peptide-Based Greener Reaction Derivatization, Y. S. Li, W. L. Tseng and C. Y. Lu\*, *Microchem. J.* 2023, 186, 108357.
  7. M. Madhu, A. S. K. Kumar, C. Y. Lu, and W. L. Tseng\*, Peptide-Modified Carbon Dot Aggregates for Ultrasensitive Detection of Lipopolysaccharide through Aggregation-Induced Emission Enhancement, *Talanta*, 2023, 253, 123851.
  8. C. H. Chuang, W. Y. Chen, W. B. Tseng, A. Lin, C. Y. Lu and Wei-Lung Tseng\*, Microwave-Mediated Synthesis of Near-Infrared-Emitting Silver Ion-Modified Gold Nanoclusters for Ratiometric Sensing of Hydrosulfide in Environmental Water and Hydrogen Sulfide in Live Cells, *ACS Sustainable Chem. Eng.* 2022, 10, 2461-2472.
  9. Y. S. Li, Y. T. Wang, W. L. Tseng and C. Y. Lu\*, Peptide-Based Chiral Derivatizing Reagents in Nano-Scale Liquid Chromatography: Effect of the Oxidation State of Cysteine Moiety on Enantioseparation of Ibuprofen, *Microchem. J.* 2022, 172, 106933.
  10. Y. S. Li, J. L. Suen, W. L. Tseng and C. Y. Lu\*, An Eco-Friendly Solvent-Free Reaction Based on Peptide Probes: Design an Extraction-free Method for Analysis of Acrylamide under Microliter Volume, *Anal. Bioanal. Chem.* 2021, 413, 7531-7539.
  11. W. B. Tseng, Y. S. Chou, C. Z. Lu, M. Madhu, C. Y. Lu and W. L. Tseng\*, Fluorescence Sensing of Heparin and Heparin-like Glycosaminoglycans by Stabilizing Intramolecular Charge Transfer State of Dansyl Acid-Labeled AG73 Peptides with Glutathione-Capped Gold Nanoclusters. *Biosens. Bioelectron.* 2021, 193, 113522.
  12. M. Madhu, C. Y. Lu and W. L. Tseng\*, Phosphorescent MoS<sub>2</sub> Quantum Dots as a Temperature

- Sensor and Security Ink. *Nanoscale Adv.* 2021, 3, 661-667.
13. C. H. Hsu, I. F. Liu, H. F. Kuo, C. Y. Li, W. S. Lian, C. Y. Chang, Y. H. Chen, W. L. Liu, C. Y. Lu, Y. R. Liu, T. C. Lin, T. Y. Lee, C. Y. Huang, C. C. Hsieh\* and P. L. Liu\*, miR-29a-3p/THBS2 Axis Regulates PAH-Induced Cardiac Fibrosis. *Int. J. Mol. Sci.* 2021, 22, 10574.
  14. W. L. Liu, C. Y. Li, W. C. Cheng, C. Y. Chang, Y. H. Chen, C. Y. Lu, S. C. Wang, Y. R. Liu, M. H. Cheng\*, I. W. Chong\* and P. L. Liu\*, High Mobility Group Box 1 Promotes Lung Cancer Cell Migration and Motility via Regulation of Dynamin-Related Protein 1. *Int. J. Mol. Sci.* 2021, 22, 3628.
  15. A. S. K. Kumar, C. Y. Lu and W. L. Tseng\*, Two in One: Poly(ethyleneimine)-Modified MnO<sub>2</sub> Nanosheets for Ultrasensitive Detection and Catalytic Reduction of 2,4,6-Trinitrotoluene and Other Nitro Aromatics. *ACS Sustainable Chem. Eng.* 2021, 9, 1142-1151.
  16. C. Y. Hsu, T. H. Hsieh, H. Y. Lin, C. Y. Lu, H. W. Lo, C. C. Tsai and E. M. Tsai\*, Characterization and Proteomic Analysis of Endometrial Stromal Cell-Derived Small Extracellular Vesicles. *J. Clin. Endocrinol. Metab.* 2021, 106, 1516-1529.
  17. Y. H. Lai, P. Y. Lee, C. Y. Lu, Y. R. Liu, S. C. Wang, C. C. Liu, Y. C. Chang, Y. H. Chen, C. C. Su, C. Y. Li and P. L. Liu\*, Thrombospondin 1-Induced Exosomal Proteins Attenuate Hypoxia-Induced Paraptosis in Corneal Epithelial Cells and Promote Wound Healing. *FASEB J.* 2021, 35, e21200.
  18. Y. S. Li, W. L. Tseng and C. Y. Lu\*, Sensitive Detection of Quinoline-Derivatized Sitagliptin in Small Volumes of Human Plasma by MALDI-TOF Mass Spectrometry, *Talanta* 2020, 218, 121143.
  19. G. L. Wu, Y. J. Shi, C. H. Huang, Y. C. Lee, L. J. Wang, J. T. Chiou, C. Y. Lu and L. S. Chang\*, Status of Asp29 and Asp40 in the Interaction of *Naja atra* Cardiotoxins with Lipid Bilayers, *Toxins* 2020, 12, 262.
  20. Y. J. Wu, C. H. Huang, T. J. Hsieh, W. L. Tseng and C. Y. Lu\*, Identification of Significant Protein Markers by Mass Spectrometry After Cells Co-treated With Different Drugs: an in vitro Survey Platform, *Rapid Commun. Mass Spectrom.* 2020, 34(S1), e8582.
  21. Y. S. Lee and C. Y. Lu\*, Direct In Situ Labeling of Target Drugs with a Fluorophore Probe to Improve MALDI-MS Detection Sensitivity in Micro-liter Plasma, *Sci. Rep.* 2019, 9, 10787.
  22. W.T. Huang, I.W. Chong, H.L. Chen, C.Y. Li, C.C. Hsieh, H.F. Kuo, C.Y. Chang, Y.H. Chen, Y.P. Liu, C.Y. Lu, Y.R. Liu, P.L. Liu\*, Pigment Epithelium-Derived Factor Inhibits Lung Cancer Migration and Invasion by Upregulating Exosomal Thrombospondin 1, *Cancer Lett.* 2019, 442, 287-298.
  23. Y. J. Wu, Y. S. Li, W. L. Tseng and C. Y. Lu\*, Microextraction Combined with Microderivatization for Drug Monitoring and Protein Modification Analysis from Limited Blood Volume Using Mass Spectrometry, *Anal. Bioanal. Chem.* 2018, 40, 7405-7414.
  24. J.J. Wang, Z.S. Wu, L.Y. Chung, C.Y. Lu and C.M. Yen\*, Galectin-9-Like from *Angiostrongylus cantonensis* Young Adult Worms Modulates Eosinophil Chemotaxis in vitro,

- J Microbiol Immunol Infect. 2018, S1684-1182, 30423-30427.
25. C.P. Lee, A.M. Ko, S.L. Chiang, C.Y. Lu, E.M. Tsai and Y.C. Ko\*, Regulatory Elements in Vectors Containing the ctEF-1 $\alpha$  First Intron and Double Enhancers for an Efficient Recombinant Protein Expression System, Sci. Rep. 2018, 8, 15396.
  26. J.G. You, C.Y. Lu, A.S. Krishna Kumar and W.L. Tseng\*, Cerium(iii)-Directed Assembly of Glutathione-Capped Gold Nanoclusters for Sensing and Imaging of Alkaline Phosphatase-Mediated Hydrolysis of Adenosine Triphosphate, Nanoscale 2018, 10, 17691-17698.
  27. A. B. Mayfield, Y. J. Chen, C. Y. Lu and C. S. Chen\*, The Proteomic Response of the Reef Coral *Pocillopora acuta* to Experimentally Elevated Temperatures, PLoS One 2018, 13, e0192001.
  28. C. L. Keng, Y. C. Lin, W. L. Tseng and C. Y. Lu\*, Design of Peptide-Based Probes for the Microscale Detection of Reactive Oxygen Species, Anal. Chem. 2017, 89, 10883-10888.
  29. C.Y. Wu, T.J. Hsieh, W.L. Tseng, C.L. Keng and C.Y. Lu\*, A Mass Spectrometry-Based Strategy Combined with Bioinformatics: A Simple Preclinical Model for Profiling Valproic-Acid-Induced Major Proteins and Modifications in Human Liver Cells, Process Biochem. 2017, 58, 78–84.
  30. J. C. Chen, C. F. Chang, D. W. Hsu, J. C. Shu, H. Y. Chen, C. Y. Chen, C. Y. Lu and C. C. Chen\*, Temporal Regulation of  $\sigma$ B by Partner-Switching Mechanism at a Distinct Growth Stage in *Bacillus cereus*, Int. J. Med. Microbiol. 2017, 307, 521-532.
  31. C. C. E. Lan, Y. T. Wang, C. Y. Lu, A. H. Fang and C. S. Wu\*, The Effect of Interaction of Heat and UVB on Human Keratinocyte: Novel Insights on UVB-Induced Carcinogenesis of the Skin, J. Dermatol. Sci. 2017, 88, 207-215
  32. C. Y. Wu, W. L. Hsu, M. H. Tsai, J. L. Liang, J. H. Lu, C. J. Yen, H. S. Yu, M. Noda, C. Y. Lu, C. H. Chen, S. J. Yan and T. Yoshioka\*, Hydrogen Gas Protects IP3Rs by Reducing Disulfide Bridges in Human Keratinocytes under Oxidative Stress, Sci. Rep. 2017, 7, 3606.
  33. W. H. Chang, D. M. Niu, C. Y. Lu, S. Y. Lin, T. C. Liu and J. G. Chang\*, Modulation the Alternative Splicing of GLA (IVS4+919G>A) in Fabry Disease, PLoS One 2017, 12, e0175929.
  34. Y. W. Chiang, C. F. Yeh, M. H. Yen, C. Y. Lu, L. C. Chiang, D. E. Shieh and J. S. Chang\*, Flos Farfae Inhibits Enterovirus 71-Induced Cell Injury by Preventing Viral Replication and Structural Protein Expression, Am. J. Chin. Med. 2017, 45, 1-19
  35. Y. H. Lee, Y. C. Lin, C. H. Feng, W. L. Tseng and C. Y. Lu\*, Derivatization-Enhanced Detection Strategy in Mass Spectrometry: Analyze 4-Hydroxybenzoate and Survey their Metabolites after Human Keratinocytes Exposed to UV Radiation. Sci. Rep. 2017, 7, 39907.
  36. J. G. You, Y. W. Liu, C. Y. Lu, W. L. Tseng\* and C. J. Yu\*, Colorimetric Assay of Heparin in Plasma Based on the Inhibition of Oxidase-Like Activity of Citrate-Capped Platinum Nanoparticles, Biosens. Bioelectron. 2017, 92, 442-448.

37. Y. C. Chang, C. C. Chiu, C. Y. Yuo, W. L. Chan, Y. S. Chang, W. H. Chang, S. M. Wu, H. L. Chou, T. C. Liu, C. Y. Lu, W. K. Yang and J. G. Chang\*, An XIST-Related Small RNA Regulates KRAS G-Quadruplex Formation beyond X-Inactivation, *Oncotarget* 2016, 7, 86713-86729.
38. S. J. Chiou\*, C. C. Wang, Y. S. Tseng, Y. J. Lee, S. C. Chen, C. H. Chou, L. Y. Chuang, Y. R. Hong, C. Y. Lu, C. C. Chiu and M. Chignard, A Novel Role for  $\beta$ 2-Microglobulin: a Precursor of Antibacterial Chemokine in Respiratory Epithelial Cells. *Sci. Rep.* 2016, 6, 31035.
39. R. Kirankumar, T. Tsuda, C. Y. Chen, C. Y. Lu, S. Kuwabata and P. Y. Chen\*, Multifunctional Electropolymerizable Carbazolebased Ionic Liquids. *RSC Adv.* 2016, 6, 15735-15744.
40. I. K. Wang, C. Y. Lu, C. L. Lin, C. C. Liang, T. H. Yen, Y. L. Liu and F. C. Sung\*, Comparison of the Risk of de novo Cardiovascular Disease between Hemodialysis and Peritoneal Dialysis in Patients with End-Stage Renal Disease. *Int. J. Cardiol.* 2016, 218, 219-224.
41. I. K. Wang, C. Y. Lu, C. H. Muo, C. T. Chang, T. H. Yen, C. C. Huang, T. C. Li and F. C. Sung\*, Analysis of Technique and Patient Survival over Time in Patients Undergoing Peritoneal Dialysis. *Int. Urol. Nephrol.* 2016, 48, 1177-1185.
42. C. P. Lee, S. L. Chiang, A. M. Ko, Y. F. Liu, C. Ma, C. Y. Lu, C. M. Huang, J. G. Chang, T. M. Kuo, C. L. Chen, E. M. Tsai, Y. C. Ko\*, ALPK1 Phosphorylates Myosin IIA Modulating TNF- $\alpha$  Trafficking in Gout Flares. *Sci. Rep.* 2016, 6, 25740.
43. K. C. Cheng, C. T. Hung, K. J. Chen, W. C. Wu, J. L. Suen, C. H. Chang, C. Y. Lu, C. H. Tseng, Y. L. Chen and C. C. Chiu\*, Quinoline-Based Compound BPIQ Exerts Anti-Proliferative Effects on Human Retinoblastoma Cells via Modulating Intracellular Reactive Oxygen Species. *Arch. Immunol. Ther. Exp.* 2016, 64, 139-147.
44. J. H. Lin, Y. C. Yang, Y. C. Shih, S. Y. Hung, C. Y. Lu and W. L. Tseng\*, Photoinduced Electron Transfer Between Fe(III) and Adenosine Triphosphate-BODIPY Conjugates: Application to Alkaline-Phosphatase-Linked Immunoassay. *Biosens. Bioelectron.* 2016, 77, 242-248.
45. C. Y. Wu, T. J. Hsieh, W. L. Tseng, C. L. Keng and C. Y. Lu\*, Valproic Acid Analysis by Mass Spectrometry Part I: Enhanced Determination of Valproic Acid by Microwave Assisted Chemical Labeling. *RSC Adv.* 2016, 6, 1925-1929.
46. T. M. Kuo, S. Y. Luo, S. L. Chiang, K. T. Yeh, H. T. Hsu, C. T. Wu, C. Y. Lu, M. H. Tsai, J. G. Chang and Y. C. Ko\*, Fibrotic Effects of Arecoline N-Oxide in Oral Potentially Malignant Disorders. *J Agric Food Chem.* 2015, 63, 5787-5794.
47. C. H. Chou, L. Y. Chuang, C. Y. Lu and J. Y. Guh\*, Vitamin D-binding Protein is Required for the Protective Effects of vitamin D in Renal Fibroblasts and is Phosphorylated in Diabetic Rats. *Mol Cell Endocrinol.* 2015, 411, 67-74.

48. C. T. Chuang, J. Y. Guh, C. Y. Lu, Y. T. Wang, H. C. Chen and L. Y. Chuang\*, Steap4 Attenuates High Glucose and S100B-Induced Effects in Mesangial Cells. *J Cell Mol Med.* 2015, 19, 1234-1244.
49. C. F. Yeh, K. C. Wang, C. Y. Lu, L. C. Chiang, D. E. Shieh, M. H. Yen and J. S. Chang\*, Yakammaoto Inhibits Enterovirus 71 Infection by Reducing Viral Attachment, Internalization, Replication, and Translation. *Kaohsiung J. Med. Sci.* 2015, 31, 293-302.
50. Y. H. Lin, C. Y. Lu, S. J. Jiang, W. Y. Hsiao, H. L. Cheng and Y. L. Chen\*, Application of a Multivariate Approach for Analyte Focusing by Micelle Collapse-Micellar Electrokinetic Chromatography for Analyzing Sunscreen Agents in Cosmetics. *Electrophoresis* 2015, 36, 2396-2403.
51. Y. L. Hsu, J. Y. Hung, Y. Y. Liang, Y. S. Lin, M. J. Tsai, S. H. Chou, C. Y. Lu and P. L. Kuo\*, S100P Interacts with Integrin  $\alpha 7$  and Increases Cancer Cell Migration and Invasion in Lung Cancer. *Oncotarget* 2015, 6, 29585-29598.
52. J. H. Lin, Y. C. Yang, Y. C. Shih, S. Y. Hung, C. Y. Lu and W. L. Tseng\*, Photoinduced Electron Transfer Between Fe(III) and Adenosine Triphosphate-BODIPY Conjugates: Application to Alkaline-Phosphatase-linked Immunoassay. *Biosens. Bioelectron.* 2015, 77, 242-248.
53. Y. R. Wang, Y. H. Yang, C. Y. Lu\* and S. H. Chen\*, Utilization of Magnetic Nanobeads for Analyzing Haptoglobin in Human Plasma as a Marker of Alzheimer's Disease by Capillary Electrophoretic Immunoassay with Laser-Induced Fluorescence Detection. *Anal. Chim. Acta* 2015, 865, 76-82.
54. Y. S. Huang, T. J. Hsieh and C. Y. Lu\*, Simple Analytical Strategy for MALDI-TOF-MS and NanoUPLC-MS/MS: Quantitating Curcumin in Food Condiments and Dietary Supplements and Screening of Acrylamide-Induced ROS Protein Indicators Reduced by Curcumin. *Food Chem.* 2015, 174, 571-576.
55. H. H. Su, L. Y. Chuang, W. L. Tseng and C. Y. Lu\*, Micro-scale Strategy to Detect Spermine and Spermidine by MALDI-TOF MS in Foods and Identification of Apoptosis-Related Proteins by Nano-Flow UPLC-MS/MS after Treatment with Spermine and Spermidine. *J. Chromatogr. B* 2015, 978-979, 131-137.
56. C. T. Chuang, J. Y. Guh, C. Y. Lu, H. C. Chen and L. Y. Chuang\*, S100B is Required for High Glucose-Induced Pro-fibrotic Gene Expression and Hypertrophy in Mesangial cells. *Int J Mol Med.* 2015, 35, 546-552.
57. Y. T. Wang, L. Y. Chuang and C. Y. Lu, Molecular Basis of R294K Mutation Effects of H7N9 Neuraminidases with Drugs and Cyclic Peptides: an in Silico and Experimental Study, *RSC Adv.* 2015,5, 57568-57575.
58. C.Y. Wu and C. Y. Lu\*, Derivatization Oriented Strategy for Enhanced Detection of Valproic Acid and its Metabolites in Human Plasma and Detection of Valproic Acid Induced Reactive Oxygen Species Associated Protein Modifications by Mass Spectrometry. *J. Chromatogr. A*

- 2014, 1374, 14-22.
59. Y. T. Wang\*, C. Y. Lu, T. C. Hour and T. Lu. Cheng, Inhibitor and Substrate Binding by New Delhi metallo-beta-lactamase-1: A Molecular Dynamics Studies. *Curr Comput Aided Drug Des.* 2014, 10, 197-204.
  60. Y. C. Shih, C. Y. Ke, C. J. Yu, C. Y. Lu and W. L. Tseng\*, Combined Tween 20-Stabilized Gold Nanoparticles and Reduced Ggraphite Oxide-Fe<sub>3</sub>O<sub>4</sub> Nanoparticle Composites for Rapid and Efficient Removal of Mercury Species from a Complex Matrix. *ACS Appl. Mater. Inter.* 2014, 6, 17437-17445.
  61. Y. T. Kao, W. C. Hsu, H. T. Hu, S. H. Hsu, C. S. Lin, C. C. Chiu, C. Y. Lu, T. C. Hour, Y. S. Pu and A. M. Huang\*, Involvement of p38 Mitogen-Activated Protein Kinase in Acquired Gemcitabine-Resistant Human Urothelial Carcinoma Sublines. *Kaohsiung. J. Med. Sci.* 2014, 30, 323-330.
  62. C. Y. Lu\*, H. H. Su, Y. L. Chen and W. L. Tseng, Micro Extraction to Quantitate Spermidine and Spermine in Human Urine and Blood by Matrix-Assisted Laser Desorption Ionization Time-of-Flight Mass Spectrometry. *J. Chromatogr. A* 2014, 1326, 1-6.
  63. S. L. Chiang, T. T. Ou, Y. J. Wu, H. P. Tu, C. Y. Lu, C. M. Huang, T. M. Kuo, T. N. Wang, C. H. Chou and Y. C. Ko\*, Increased Level of MSU Crystal-Bound Protein Apolipoprotein A-I in Acute Gouty Arthritis, *Scand. J. Rheumatol.* 2014, 43, 498-502.
  64. B. Pasaribu, I. P. Lin, C. S. Chen, C. Y. Lu and P. L. Jiang\*, Nutrient Limitation in *Auxenochlorella protothecoides* Induces Qualitative Changes of Fatty Acid and Expression of Caleosin as a Membrane Protein Associated with Oil Bodies. *Biotechnol. Lett.* 2014, 36, 175-180.
  65. H. Cheng, H. T. Chen, K. C. Hsien, C. Y. Lu and P. Y. Chen\*, New copper complexes incorporated with the one-step preparation of ionic liquid carbon paste electrode for highly selectively reducing hydrogen peroxide. *Electrochem. Commun.* 2014, 40, 38-41.
  66. C. Y. Kuo, H. C. Wang, P. H. Kung, C. Y. Lu, C. Y. Liao, M. T. Wu and C. C. Wu\*, Identification of CalDAG-GEFI as an intracellular target for the vicinal dithiol binding agent phenylarsine oxide in human platelets. *Thromb. Haemost.* 2014, 111, 892-901.
  67. S. C. Chen\*, S. Y. Huang, C. Y. Lu, Y. H. Hsu and D. C. Wang, Microvascular Dysfunction with Increased Vascular Leakage Response in Mice Systemically Exposed to Arsenic. *Cardiovasc. Toxicol.* 2014, 14, 222-231.
  68. H. H. Li, Z. Y. Huang, S. P. Ye, C. Y. Lu, P. C. Cheng, S. H. Chen and C. S. Chen\*, Membrane Labeling of Coral Gastrodermal Cells by Biotinylation: the Proteomic Identification of Surface Proteins Involving Cnidaria-Dinoflagellate Endosymbiosis. *PloS One* 2014, 9, e85119.
  69. M. H. Yang, S. S. Yuan, Y. F. Huang, P. C. Lin, C. Y. Lu, T. W. Chung and Y. C. Tyan\*, A Proteomic View to Characterize the Effect of Chitosan Nanoparticle to Hepatic Cells: is Chitosan Nanoparticle an Enhancer of PI3K/AKT1/mTOR Pathway? *Biomed. Res. Int.* 2014, 2014, 789591 (9 pages).

70. M. H. Yang, S. S. Yuan, T. W. Chung, S. B. Jong, C. Y. Lu, W. C. Tsai, W. C. Chen, P. C. Lin, P. W. Chiang and Y. C. Tyan\*, Characterization of silk fibroin modified surface: a proteomic view of cellular response proteins induced by biomaterials. *Biomed. Res. Int.* 2014, 2014, 209469 (13 pages).
71. D. E. Cheng, J. Y. Hung, M. S. Huang, Y. L. Hsu, C. Y. Lu, E. M. Tsai, M. F. Hou and P. L. Kuo\*, Myosin Iia activation is crucial in breast cancer derived galectin-1 mediated tolerogenic dendritic cell differentiation. *Biochim. Biophys. Acta* 2014, 1840, 1965-1976.
72. T. H. Chen, C. Y. Lu and W. L. Tseng\*, One-Pot Synthesis of Two-Sized Clusters for Ratiometric Sensing of Hg<sup>2+</sup>, *Talanta* 2013, 117, 258-262.
73. N. C. Lo, H. Y. Chen, W. J. Chuang, C. Y. Lu, P. Y. Chen and P. Y. Chen\*, Anion Reduction Dominated Cathodic Limit of Metal-Free Ionic Liquid: Experimental and Theoretical Proofs, *J. Phys. Chem. B* 2013, 117, 13899-13905.
74. R. C. Chen, L. Y. Chuang, W. L. Tseng, Y. C. Tyan and C. Y. Lu\*, Determination of Phosphoserine/Threonine by NanoUPLC-MS/MS Coupled with Micro-Scale Labeling. *Anal. Biochem.* 2013, 443, 187-196.
75. A. Y. Huang, C. H. Tsai, H. Y. Chen, H. T. Chen, C. Y. Lu, Y. T. Lin and C. L. Kao\*, Concise Solid-Phase Synthesis of Inverse Poly(amidoamine) Dendrons Using AB<sub>2</sub> Building Blocks. *Chem. Commun.* 2013, 49, 5784-5786.
76. M. H. Yang, H. Y. Wang, C. Y. Lu, W. C. Tsai, P. C. Lin, S. B. Su and Y. C. Tyan\*, Proteomic Profiling for Peritoneal Dialysate: Differential Protein Expression in Diabetes Mellitus. *Biomed. Res. Int.* 2013, 2013, 642964 (15 pages).
77. T. Y. Wu, Y. C. Du, Y. M. Hsu, C. Y. Lu, A. N. B. Singab, M. El-Shazly, T. L. Hwang, W. Y. Lin, K. H. Lai, M. C. Lu, Y. H. Tsai, M. F. Hou, T. H. Duh and F. R. Chang\*, New Approach to the Characterization and Quantification of *Antrodia Cinnamomea* Benzenoid Components Utilizing HPLC-PDA, qNMR and HPLC-Tandem MS: Comparing the Wild Fruiting Bodies and its Artificial Cultivated Commercial Products. *Food. Res. Int.* 2013, 51, 23-31.
78. Y. R. Wang, Y. H. Yang, C. Y. Lu, S. J. Lin and S. H. Chen\*, Trace Analysis of Acetylcholinesterase Inhibitors with Antipsychotic Drugs for Alzheimer's Disease by Capillary Electrophoresis with on Column Field-Amplified Sample Injection. *Anal. Bioanal. Chem.* 2013, 405, 3233-3242.
79. C. H. Chou, L. Y. Chuang, C. Y. Lu and J. Y. Guh\*, Interaction between TGF- $\beta$  and ACE2-Ang-(1-7)-Mas Pathway in High Glucose-cultured NRK-52E Cells. *Mol. Cell. Endocrinol.* 2013, 366, 21-30.
80. T. H. Lin, C. Y. Lu and W. L. Tseng\*, Selective Enrichment of Catecholamines Using Iron Oxide Nanoparticles Followed by CE with UV Detection, *Electrophoresis* 2013, 34, 297-303.
81. Y. C. Tyan\*, M. H. Yang, T. W. Chung, C. Y. Lu, W. C. Tsai and S. B. Jong, Assessing Human Urinary Proteome Using a Mass Spectrometry-Based Profiling System Combined with Magnetic Nanoparticles. *Clin. Chim. Acta* 2013, 420, 54-61.



82. C. H. Chou, L. Y. Chuang, W. L. Tseng and C. Y. Lu\*, Characterization of Protein Adducts Formed by Toxic Alkaloids by Nano-scale Liquid Chromatography with Mass Spectrometry. *J. Mass Spectrom.* 2012, 47, 1303-1312.
83. M. H. Yang, S. B. Jong, C. Y. Lu, Y. F. Lin, P. W. Chiang, Y. C. Tyan\* and T. W. Chung, Assessing the Responses of Cellular Proteins Induced by Hyaluronic Acid-Modified Surfaces Utilizing a Mass Spectrometry-Based Profiling System: Over-Expression of CD36, CD44, CDK9, and PP2A. *Analyst* 2012, 137, 4921-4933.
84. L. C. Chen, J. C. Chen, J. C. Shu, C. Y. Chen, S. C. Chen, S.H. Chen, C. Y. Lin, C. Y. Lu and C. C. Chen\*, Interplay of RsbM and RsbK Controls the  $\sigma(B)$  Activity of *Bacillus cereus*. *Environ. Microbiol.* 2012, 14, 2788-2799.
85. M. H. Yang, Y. H. Yang, C. Y. Lu, S. B. Jong, L. J. Chen, Y. F. Lin, S. J. Wu, P. Y. Chu, T. W. Chung and Y. C. Tyan\*, Activity-Dependent Neuroprotector Homeobox Protein: A Candidate Protein Identified in Serum as Diagnostic Biomarker for Alzheimer's Disease. *J. Proteomics* 2012, 75, 3617-3629.
86. Y. C. Du, T. Y. Wu, F. R. Chang, W. Y. Lin, Y. M. Hsu, F. T. Cheng, C. Y. Lu, M. H. Yen, Y. T. Tsui, H. L. Chen, M. F. Hou, M. C. Lu\* and Y. C. Wu\*, Chemical Profiling of the Cytotoxic Triterpenoid-Concentrating Fraction and Characterization of Ergostane Stereo-Isomer Ingredients from *Antrodia amphorate*. *J. Pharm. Biomed. Anal.* 2012, 58, 182-192.
87. C. Y. Lu, F. T. Liu and C. H. Feng\*, Quantitation of Quinapril in Human Plasma by Matrix-Assisted Laser Desorption Ionization Time-of-Flight Mass Spectrometry with Quinolone Matrix Additives. *J. Chromatogr. B* 2011, 879, 2688-2694.
88. S. E. Peng, W. N. Chen, H. K. Chen, C. Y. Lu, A. B. Mayfield, L. S. Fang and C. S. Chen\*, Lipid bodies in coral-dinoflagellate endosymbiosis: proteomic and ultrastructural studies. *Proteomics* 2011, 11, 3540-3555.
89. Z. Y. Tsai , C. H. Chou, C. Y. Lu, S. Singh, S. L. Yu and S. S. Li\*, Proteomic comparison of human embryonic stem cells with their differentiated fibroblasts: Identification of 206 genes targeted by hES cell-specific microRNAs. *Kaohsiung J. Med. Sci.* 2011, 27, 299-306.
90. C. L. Kao\*, Y. H. Tang, Y. C. Lin, L. T. Chiu, H. T. Chen, S. C. Hsu, K. C. Hsieh, C. Y. Lu and Y. L. Chen, Copper Complex of a Pyridine-Modified Poly(amidoamine) Dendrimer as a Chemical Nuclease: Synthetic and Catalytic Study. *Nanomedicine* 2011, 7, 273-276.
91. A. M. Huang\*, Y. T. Kao, S. Toh, P. Y. Lin, C. H. Chou, H. T. Hu, C. Y. Lu, J. Y. Liou, S. Y. Chao, T. C. Hour and Y. S. Pu, UBE2M-mediated p27(Kip1) Degradation in Gemcitabine Cytotoxicity. *Biochem. Pharmacol.* 2011, 82, 35-42.
92. S. F. Cho, T. C. Liu, C.Y. Lu and C. S. Chang\*, Epidural Leukemic Involvement and Intracranial Hemorrhage as Initial Manifestations in a Newly Diagnosed Chronic Myeloid Leukemia Patient. *Ann. Hematol.* 2011, 90, 607-609.
93. C. H. Feng, H. Y. Huang and C. Y. Lu\*, Quantitation of the Glutathione in Human Peripheral Blood by Matrix-Assisted Laser Desorption Ionization Time-of-Flight Mass Spectrometry

- Coupled with Micro-scale Derivatization. *Anal. Chim. Acta* 2011, 690, 209-214.
94. C. H. Feng and C. Y. Lu\*, Modification of Major Plasma Proteins by Acrylamide and Glycidamide: Preliminary Screening by Nano Liquid Chromatography with Tandem Mass Spectrometry. *Anal. Chim. Acta* 2011, 684, 80-86.
  95. C. Y. Lu and C. H. Feng\*, Quantitation of Irbesartan and Major Proteins in Human Plasma by Mass Spectrometry with Time-of-Flight Analyzer. *J. Pharm. Biomed. Anal.* 2011, 54, 100-105.
  96. C. H. Feng, C. H. Chou, L. Y. Chuang and C. Y. Lu\*, Identification of the Metabolites of Angiotensin II (1-8) in MES-13 Cells by a Simple NanoLC-MS-MS System: a Preliminary Platform. *Anal. Lett.* 2011, 44, 1187-1196.
  97. H. L. Cheng, S. S. Chiou, Y. M. Liao, C. Y. Lu, Y. L. Chen and S. M. Wu\*, Analysis of Methotrexate and Its Eight Metabolites in Cerebrospinal Fluid by Solid-Phase Extraction and Triple-Stacking Capillary Electrophoresis. *Anal. Bioanal. Chem.* 2010, 398, 2183-2190
  98. H. H. Yeh, H. L. Wu, C. Y. Lu and S. H. Chen\*, Simultaneous Determination of Regular Insulin and Insulin Aspart by Capillary Zone Electrophoresis and Application in Drug Formulations. *J. Pharm. Biomed. Anal.* 2010, 53, 145-150.
  99. C. H. Feng, C. H. Chou, L. Y. Chuang and C. Y. Lu\*, Protein Identification from Two-Dimensional Gel Electrophoresis by Connecting ZipTip with a Home-Assembled Nanoflow System. *Microchim. Acta* 2010, 170, 179-185.
  100. C. Y. Lu, Y. R. Wang, S. H. Chen and C. H. Feng\*, Analysis of Quinapril by Two Solvent Saving Methods: Application of Capillary Liquid Chromatography and LDI-TOF MS. *J. AOAC Int.* 2010, 93, 1201-1206.
  101. Y. P. Lin, M. E. Hsu, Y. Y. Chiou, H. Y. Hsu, H. C. Tsai, Y. J. Peng, C. Y. Lu, C. Y. Pan, W. C. Yu, C. H. Chen, C. W. Chi and C. H. Lin\*, Comparative Proteomic Analysis of Rat Aorta in a Subtotal Nephrectomy Model. *Proteomics* 2010, 10, 2429-2443.
  102. S. E. Peng, Y. B. Wang, L. H. Wang, W. N. U. Chen, C. Y. Lu, L. S. Fang and C. S. Chen\*, Proteomic Analysis of Symbiosome Membranes in Cnidaria-Dinoflagellate Endosymbiosis. *Proteomics* 2010, 10, 1002-1016.
  103. C. H. Feng and C. Y. Lu\*, A Micro-Scale Model to Monitor the Major Proteins in Human Urine before and after Medication with Angiotensin-Converting Enzyme Inhibitor: a Preliminary Study. *Anal. Lett.* 2010, 43, 2705-2715.