專書及專書論文:

- 1. Suresh Kailasa, Hui-Fen Wu*, Comprehensive Sampling and Sample Preparation. Volume 3, Chapter title: Inorganic Contaminants: Sample Preparation Approaches. Pawliszyn, J.; Le, X. C.; Li, X-F.; Lee, H. K.; Eds; Elsevier, Academic Press: Oxford, UK, pp 743–782, 2012.
- 2. Suresh Kailasa, Hui-Fen Wu*, Vaibhavkumar Mehta, Quantum Dots: Applications, Synthesis and Characterization. Chapter 5: Prospects of Engineering Quantum Dots Applications in Ultrasensitive Assays, Nova Science Publishers, 2012, Accepted.
- 3. Suresh Kailasa, Hui-Fen Wu*, Cysteine: Biosynthesis, Chemical Structure and Toxicity. Chapter title: Toxicity of Cysteine: Towards Biopathways. Nova Science Publishers, 2012, Accepted.
- Suresh Kailasa and Hui-Fen Wu*, Book title: Lysozymes: Sources, Functions and Role in Disease. Chapter title: Functions of Lysozymes and their identification of by MALDI-MS. Nova Science Publishers, 2012, Accepted.

期刊論文: (*Corresponding author, citation to July 25, 2012)

- 1. Nazim Hasan, Judy Gopal, Hui-Fen Wu*, Fabrication of titanium based MALDI bacterial chip for rapid, sensitive and direct analysis of pathogenic bacteria, **Biosensors and Bioelectronics**, 2012, in press. DOI: 10.1016/j.bios.2012.06.036.
- 2. Muthu Manikandan, Hui-Fen Wu*, Nazim Hasan, Cell population based mass spectrometry using platinum nanodots for algal and fungal studies. **Biosensors and Bioelectronics**, 2012, May, 35, 493-497. (IF5.602, 1/26, 3.85%, Electrochemistry, 4/73, 5.48%, Chemistry, Analytical).
- 3. Chia-Hsun Lee, Judy Gopal, Hui-Fen Wu*, Ionic solution and nanoparticle assisted MALDI-MS as bacterial biosensors for rapid analysis of yogurt, **Biosensors and Bioelectronics**, 2012, Jan, 31, 77-83 (IF5.602, 1/26, 3.85%, Electrochemistry, 4/73, 5.48%, Chemistry, Analytical). Highlighted in the featured article of "**Advances in Engineering**", 2012. (http://advancesinengineering.com/page/2/)
- 4. Faheem Ahmad, Mansoor Siddiqui, Olubukola Babalola, Hui-Fen Wu*, Biofunctionalization of nanoparticle assisted mass spectrometry as biosensors for rapid detection of plant associated bacteria, **Biosensors and Bioelectronics**, 2012, May, 35, 235-242. (IF5.602, 1/26, 3.85%, Electrochemistry, 4/73, 5.48%, Chemistry, Analytical).
- 5. Judy Gopal, Chia-Hsun Lee, Hui-Fen Wu*, Rapid and direct detection of invivo kinetics of pathogenic bacterial infection from mouse blood and urine. **Journal of Proteomics**, 2012, 75, 2972-2982 (IF5.074, 10/71, 14.08%, Biochemical Research Methods).
- 6. Suresh Kailasa, Hui-Fen Wu*, Functionalized quantum dots modified with dopamine dithiocarbamate as the matrix for quantification of efavirenz in human plasma and as affinity probes for rapid identification of microwave tryptic digested proteins in MALDI-TOF-MS. **Journal of Proteomics**, 2012, 75, 2924-2933 (IF5.074).
- 7. Hui-Fen Wu*, Judy Gopal, Muthu Manikandan, Future perspective of Nanoparticle interaction laser desorption/ionization mass spectrometry (NPILDI-MS) for rapid, simple, direct and sensitive detection of microorganisms. **Journal of Mass Spectrometry**, Special feature article-Perspective/Front cover image/Author Biographies (特寫文章/封面報導/人物介紹), 2012, 47, 355-363. (IF3.289, 8/42, 19.05%, Spectroscopy).
- 8. Suresh Kailasa, Hui-Fen Wu*, Dispersive liquid-liquid microextraction using functionalized Mg(OH)2 NPs with oleic acid as hydrophobic affinity probes for the analysis of hydrophobic proteins in bacteria by MALDI-MS, **Analyst**, 2012, in press (IF4.23, 8/73, 10.96%).
- 9. Judy Gopal, Hui-Fen Wu*, Chia Hsun Lee, Muthu Manikandan, Tracing the pathogen staphylococcus aureus on laboratory ants using physical preconcentration coupled ZnO nanoparticle assisted MALDI-TOF MS. Analyst, 2012, Jan, 137 (2), 357-364 (Featured in the back cover image 底封面報導) (IF4.23, 8/73, 10.96%).
- 10. Kamlesh Shrivas, Hui-Fen Wu*, Rapid and highly sensitive protein extraction via cobalt oxide nanoparticle based liquid-liquid microextraction coupled with MALDI mass spectrometry, **Analyst**, 2012, Feb, 137 (4), 890-895 (IF4.23, 8/73, 10.96%). (**Featured in the inside front cover image 內**

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封面報導)

- 11. Suresh Kailasa, Hui-Fen Wu*, One-pot synthesis of dopamine dithiocarbamate functionalized gold nanoparticles for quantitative analysis of small molecules and phosphopeptides in SALDI and MALDI-MS. **Analyst**, 2012, April, 137 (7), 1629-1638.
- 12. Jayaram Narayana, Judy Gopal, Hui-Fen Wu*, Wound infection kinetics probed by MALDI-MS: Rapid profiling of Staphylococcus aureus in mice. **Analyst**, 2012, July, 137 (14), 3372-3380.
- 13. Faheem Ahmad, Judy Gopal, Hui-Fen Wu*, Rapid and highly sensitive detection of single nematode via direct MALDI Mass Spectrometry. **Talanta**, 2012, 93, 182-185. (IF3.794, 12/73, 16.44%, Chemistry, Analytical).
- 14. Suresh Kailasa, Nazim Hasan, Hui-Fen Wu*, Identification of multiply charged proteins and amino acid clusters by liquid nitrogen assisted spray ionization mass spectrometry, **Talanta**, 2012, 97, 539-549. (IF3.794, 12/73, 16.44%, Chemistry, Analytical).
- 15. Faheem Ahmad, Hui-Fen Wu*, High resolution detection of bacterial proteins using the Tris-EDTA buffer approach on MALDI-TOF mass spectrometry, **Microchimica Acta**, 2012, 176, 311-316.(IF3.033, 18/73, 24.66%, Chemistry, Analytical).
- 16. Suresh Kailasa, Hui-Fen Wu*, Rapid enrichment of phosphopeptides by BaTiO3 nanoparticles after microwave-assisted tryptic digest of phosphoproteins, and their identification by MALDI-MS. **Microchimica Acta**, 2012, in press. DOI: 10.1007/s00604-012-0854-x. (IF3.033).
- 17. Gangaraju Gedda, Judy Gopal, Hui-Fen Wu*, ESI-MS and MALDI-MS analysis of extrapolysaccharides of E.coli. **Rapid Communications in Mass Spectrometry**. 2012, July, 26, 1609-1616. (IF2.846, 19/73, 26.03%, Chemistry, Analytical).
- 18. Hui-Fen Wu*, Biochips and tissue chips integrating biologists, physicist, chemist and material scientists, **Joirnal of Biochips & Tissue Chips.** Editorial Article. Vol.2, 1st Issue, 2012.
- 19. Judy Gopal, Jayaram Narayana, Hui-Fen Wu*, TiO2 nanoparticle assisted Mass spectrometry as biosensor of Staphylococcus aureus, key pathogen in nosocomial infections from air, skin surface and human nasal passage. **Biosensors and Bioelectronics**, 2011, Sep, 27, 201-206 (Times cited 6).
- 20. Judy Gopal, Hui-Fen Wu*, Gangaraju Gedda, Quantifying the degradation of extracellular polysaccharides of Escherichia coli by CdS quantum dots. **Journal of Materials Chemistry**, 2011, 21, 13445-13451 (IF5.101, 16/225, 7.11%, Materials Science, Multidisciplinary, Times cited 3).
- 21. Nazim Hasan, Judy Gopal, Hui-Fen Wu*, Rapid, sensitive and direct analysis of exopolysaccharides from biofilm on aluminum surfaces exposed to sea water using MALDI-TOF MS. **Journal of mass spectrometry**, 2011, 46, 1160-1167 (IF3.289, 8/42, 19.05%, Spectroscopy).
- 22. Judy Gopal, Hui-Fen Wu*, Chia-Hsun Lee, The bifunctional role of Ag nanoparticles on bacteria- a MALDI-MS perspective. **Analyst**, 2011, Nov, 136, 5077-5083 (Times cited 2).
- 23. Faheem Ahmad, Hui-Fen Wu*, Pt nanoparticles prepared in ionic liquid to extract bacteria from plasma via single drop microextraction coupled with MALDI mass spectrometry. **Analyst**, 2011, Oct, 136, 4020-4027 (Times cited 4).
- 24. Kamlesh Shrivas, Kavita Agrawal, Hui-Fen Wu*, Application of platinum nanoparticles as affinity probe and matrix for direct analysis of small biomolecules and microwave digested proteins using matrix-assisted laser desorption/ionization mass spectrometry, **Analyst**, 2011, July, 136, 2852-2857. (Times cited 2)
- 25. Nazim Hasan, Hui-Fen Wu*, Highly selective and sensitive enrichment of phosphopeptides via NiO nanoparticles using microwave assisted centrifugation-on particles ionization/enrichment approach in MALDI-MS. **Analytical and Bioanalytical Chemistry**, 2011, July, 400, 3451-3462. (IF3.841, 9/73, 12.33%, Chemistry, Analytical, Times cited 2).
- 26. Hui-Fen Wu*, Feng-Tsai Chung, 3-Mercaptopropionic acid modified ZnSe quantum dots as the matrix for direct SALDI-MS analysis of peptides/proteins from high salt solution, **Rapid Communications in Mass Spectrometry**, 2011, June, 25, 1779-1786. (Times cited 1).
- 27. Hui-Fen Wu*, Suresh Kailasa, Chi-Hsien Lin, Single drop microextraction coupled with MALDI mass spectrometry for rapid and direct analysis of hydrophobic peptides from biological samples in high salt solution, **Rapid Communications in Mass Spectrometry**, 2011, Jan, 25, 307-315. (Times cited 1).
- 28. Suresh Kailasa, Hui-Fen Wu*, Semiconductor cadmium sulphide nanoparticles as matrices for

- peptides and as co-matrices for the analysis of large proteins in MALDI reflectron and linear TOF MS, **Rapid Communications in Mass Spectrometry**, 2011, Jan, 25, 271-280. (Times cited 1).
- 29. Hui-Fen Wu*, Chen-Che Chin, Bo-Min Liu, Yuan-Chin Chen, Chi-Hsien Lin, Kai-Di Chang, Yi-Hsien Lee, Self assembly formation of magic ion of $(H_2O)_{20}O^+$: observation of nanoscale cages of oxygenated water clusters induced from iron nanoparticles, **Rapid Communications in Mass Spectrometry**, 2011, Feb, 25, 410-414. (Highlighed in the textbook of "Fundamentals of Analytical Chemistry", 9th ed., to be published by Cengage/Brooks/Cole in 2013, Authors: Skoog, West, Holler, Crouch 分析化學教科書報導).
- 30. Anita Ethiraj, Hui-Fen Wu*, Judy Gopal, Synthesis and characterization of ultrasmall thioglycerol modified ZnS quantum dots, **Journal of the Chinese Chemical Society**, 2011, 58, 805-812 (IF 0.718, 99/147, 67.35%, Chemistry, Multidisciplinary).
- 31. Judy Gopal, Hui-Fen Wu*, Yi-Hsien Lee, Matrix Assisted Laser Desorption Ionization Time of Flight Mass Spectrometry as a rapid and reliable technique for directly evaluating bactericidal activity: Probing the critical concentration of ZnO nanoparticles as affinity probes. **Analytical Chemistry**, 2010, Dec, 82, 9617-9621. (IF5.856, 3/73, 4.11%, Times cited 10).
- 32. Kamlesh Shrivas, Hui-Fen Wu*, Multifunctional nanoparticles composite for MALDI-MS: Cd²⁺ doped carbon nanotubes with CdS nanoparticles as the matrix, preconcentrating and accelerating probes of microwave enzymatic digestion of peptides and proteins for direct MALDI-MS analysis. **Journal of Mass Spectrometry**, 2010, Dec, 45, 1452-1460. (Times cited 2).
- 33. Hui-Fen Wu*, Kavita Agrawal, Kamlesh Shrivas, Yi-Hsien Lee, On particle ionization/enrichment of multifunctional nanoprobes: washing/separation-free, acceleration and enrichment of microwave-assisted tryptic digestion of proteins via bare TiO2 nanoparticles in ESI-MS and comparing to MALDI-MS, **Journal of Mass Spectrometry**, 2010, Dec, 45, 1402-1408 (Times cited 2).
- 34. Suresh Kailasa, Hui-Fen Wu*, Surface modified silver selinide nanoparticles as extrating probes to improve peptide/protein detection via nanoparticles-based liquid phase microextraction coupled with MALDI mass spectrometry. **Talanta**, 2010, Dec, 83, 527-534. (Times cited 2).
- 35. Yaotang Ke, Suresh Kailasa, Hui-Fen Wu*, Zhen-Yu Chen, High resolution detection of proteins up to 80000 Da via multifunctional CdS quantum dots in laser desorption/ionization mass spectrometry. Talanta, 2010, Nov, 83, 178-184.(Times cited 6). Recommanded by Faculty 1000 Biology (F1000-Biology 推薦論文).
- 36. Hui-Fen Wu*, Suresh Kailasa, Lokesh Shastri, Electrostatically self -assembled -azides on zinc sulfide nanoparticles as multifunctional nanoprobes for peptide and protein analysis in MALDI-TOF MS, **Talanta**, 2010, July, 82, 540-547 (Times cited 1).
- 37. Lokesh Shastri, Suresh Kailasa, Hui-Fen Wu*, Nanoparticle-single drop microextraction as multifunctional and sensitive nanoprobes: Binary matrix approach for gold nanoparticles modified with (4-mercaptophenyliminomethyl)-2-methoxyphenol for peptide and protein analysis in MALDI-TOF MS, **Talanta**, 2010, June, 81, 1176-1182 (Times cited 8).
- 38. Li, Shuping; Guo, Zhongxian*; Wu, Hui-Fen*; Liu, Ying; Yang, Zhaoguang; Woo, Chee Hoe, Rapid analysis of Gram-positive bacteria in water via membrane filtration coupled with nanoprobe based MALDI-MS, **Analytical and Bioanalytical Chemistry**, 2010, July, 397, 2465-2476 (Times cited 9).
- 39. Nazim Hasan, Hui-Fen Wu*, Yi-Hsien Li, Mohd Nawaz, Two step on particle ionization/enrichment via a washing and separation free approach: multifunctional TiO₂ nanoparticles as desalting, accelerating and affinity probes for microwave assisted tryptic digestion of phosphoproteins in ESI-MS and MALDI-MS: comparison with microscale TiO₂, Analytical and Bioanalytical Chemistry, 2010, Apr, 396, 2919-2929 (Times cited 7). (Selected as "Paper in forefront"前瞻論文).
- 40. Suresh Kailasa, Hui-Fen Wu*, Multifunctional ZrO₂ nanoparticles and ZrO₂@SiO₂ nanorods for improved MALDI-MS analysis of cyclodextrin, peptide and phosphoprotein. **Analytical and Bioanalytical Chemistry**, 2010, Feb, 396, 1115-1125 (Times cited 8).
- 41. Suresh Kailasa and Hui-Fen Wu*, Interference free detection for small molecules: Probing the

- Mn²⁺-doped effect and cysteine capped effect on the ZnS nanoparticles for coccidiostats and peptide analysis in SALDI-TOF MS, **Analyst**, 2010, Mar, 135, 1115-1123 (Times cited 5).
- 42. Abdul Bhat, Hui-Fen Wu*, Synthesis, characterization and application of modified Pd nanoparticles as preconcentration probes for selective enrichment/analysis of proteins via hydrophobic interactions from real world samples using Nanoparticle-Liquid-Liquid Microextraction coupled to MALDI-TOF MS. **Rapid Communications in Mass Spectrometry**, 2010, Dec, 24, 3547-3552 (IF2.79, Times cited:1).
- 43. Yaotang Ke, Suresh Kailasa, Hui-Fen Wu*, Mohd Nawaz, Surface modified TiO₂ nanoparticles as affinity probes and as matrices for the rapid analysis of phosphopeptides and proteins in MALDI-TOF-MS, **Journal of separation science**, 2010, Nov, 33, 3400-3408 (IF 2.733, Times cited:2).
- 44. Kamlesh Shrivas, Suresh Kailasa, Hui-Fen Wu*, Quantum dots laser desorption/ionization mass spectrometry (QDLDI-MS): multifunctional CdSe quantum dots as the matrix, concentrating probes and acceleration for microwave enzymatic digestion for peptide analysis and high resolution detection of proteins in a linear MALDI-TOF MS, **Proteomics**, 2009, May, 9, 2656-2667. (IF4.815, 13/71, 18.31%, Biochemical research methods, Times cited 33, **Featured in the front cover image**, 對面報導).
- 45. Kamlesh Shrivas, Suresh Kailasa, Hui-Fen Wu*, Quantum dots electrospray ionization mass spectrometry: 3-mercaptopropanic acid capped CdS quantum dots as accelerating and enrichment probes for microwave tryptic digestion of proteins. **Rapid Communications in Mass Spectrometry**, 2009, 23, 3603-3607.
- 46. Lokesh Shastri, Suresh Kailasa, Hui-Fen Wu*, Cysteine-capped ZnSe quantum dots as affinity and accelerating probes for microwave enzymatic digestion of proteins via direct matrix-assisted laser desorption/ionization time-of-flight mass spectrometric analysis. **Rapid Communications in Mass Spectrometry**, 2009, Aug, 23, 2247-2252. (Times cited 11).
- 47. Yuan-Chin Chen, Hui-Fen Wu*, Revolving hollow fiber-liquid phase microextraction coupled to GC/MS using electron ionization for quantification of five aromatic hydrocarbon isomers, **Journal of Separation Science**, 2009, Sep, 32, 3013-3019. (Times cited 5, Top 10 articles in BioMedLib).
- 48. N. Rahman*, S.N.H. Azmi, Hui-Fen Wu, Nanoparticles and atmospheric pressure-matrix assisted laser desorption/ionization mass spectrometry for peptides and drugs analysis, **The Icfai University press Journal of Chemistry**, 2009, 2, 7-17.
- 49. Suresh Kailasa, Kamtaman Kiran, Hui-Fen Wu*, Comparison of ZnS Semiconductor Nanoparticles Capped with Various Functional Groups as the Matrix and Affinity Probes for Rapid Analysis of Cyclodextrins and Proteins in the SALDI-TOF Mass Spectrometry, **Analytical Chemistry**, 2008, Dec, 80, 9681-9688.(Times cited 44).
- **50.** Kamlesh Shrivas, Hui-Fen Wu*, Modified Silver Nanoparticle as Hydrophobic Affinity Probes for Rapid Analysis of Peptide and Proteins in Biological Samples by coupling liquid-liquid microextraction with AP-MALDI/ion trap and MALDI/Time of Flight Mass Spectrometry. **Analytical Chemistry**, 2008, Apr, 80, 2583-2589. (Times cited 49, Top 10 articles in BioMedLib).
- 51. Kamlesh Shrivas, Hui-Fen Wu*, Oxidized multiwall carbon nanotubes for quantitative determination of cationic surfactants in water samples using AP-MALDI-ion trap Mass Spectrometry. **Analytica Chimica Acta**, 2008, Nov, 628, 198-203. (IF4.555, 5/73, 6.85%, Times cited 13).
- 52. Kamlesh Shrivas, Hui-Fen Wu*, Applications of silver nanoparticles capped with different functional groups as the matrix and affinity probes in SALDI-TOF and AP-MALDI- ion trap mass spectrometry for rapid analysis of sulphur drugs and biothiols in human urine, **Rapid Communications in Mass Spectrometry**, 2008, Sep, 22, 2863-2872.(Times cited 32).
- 53. Putty Sudhir, Kamlesh Shrivas, Zi-Chong Zhou, Hui-Fen Wu*, Single drop microextraction using silver nanoparticles as electrostatic probes for peptide analysis in AP-MALDI/MS and comparison with gold electrostatic probes and silver hydrophobic probes, **Rapid Communications in Mass Spectrometry**, 2008, Oct, 22, 3076-3086. (Times cited 15, Top 10 articles in BioMedLib).
- 54. Kavita Agrawal, Hui-Fen Wu*, Bare silica nanoparticles as concentrating and affinity probes for rapid analysis of aminothiols, lysozyme and peptide mixtures using AP-MALDI/ion trap and MALDI/TOF mass spectrometry, **Rapid Communications in Mass Spectrometry**, 2008, Feb, 22, 283-290.

- (Times cited 28).
- 55. Kavita Agrawal, Hui-Fen Wu*, Kamlesh Shrivas, Reverse Micelle-Microextraction as concentrating and affinity probes for rapid analysis of thiopeptide in the AP-MALDI/ion trap and MALDI/TOF Mass Spectrometry. **Rapid Communications in Mass Spectrometry**, 2008, May, 22, 1437-1444. (Times cited 7).
- 56. Kamlesh Shrivas, Hui-Fen Wu*, Functionalized multiwalled carbon nanotubes as a preconcentrating probe for rapid monitoring of cationic dyestuffs in environmental water using AP-MALDI/MS. **Journal of Separation Science**, 2008, 31, 3603-3611.
- 57. Chih-Hao Yang, Nadeem Khan, Hui-Fen Wu*, Differentiation and quantification of xylene isomers by combining headspace solid-phase microextraction/gas chromatography and self-ion molecule reaction in an ion trap tandem mass spectrometry, **Journal of Separation Science**, 2008, Sep, 31, 3050-3057. (IF2.733, Times cited 3).
- **58.** Hui-Fen Wu*, Hsin-Yi Ku, Jyh-Hao Yen, Liquid-phase microextraction for rapid AP-MALDI and quantitation of nortriptyline in biological matrices, **Journal of Separation Science**, 2008, July, 31, 2288-2294.(IF2.733, Times cited 12, Top 10 articles in BioMedLib).
- **59.** Hui-Fen Wu*, Jyh-Hao Yen, Dynamic liquid phase nanoextraction coupled to GC/MS for rapid analysis of methoxyacetophenone and anisaldehye isomers in urine. **Journal of Separation Science**, 2008, July, 31, 2295-2302. (IF2.733, Top 10 articles in BioMedLib, Times cited 2).
- 60. Kamlesh Shrivas, Hui-Fen Wu*, Ultrasonication followed by single drop microextraction combined with GC/MS for rapid determination of organochlorine pesticides from fish. **Journal of Separation Science**, 2008, Feb, 31, 380-386. (Times cited 20).
- 61. Yao-Tang Ke, Hui-Fen Wu*, Applications of functional nanoparticles as the affinity probes for analysis of peptides and proteins by coupling solvent microextraction with the MALDI mass spectrometry, **Chemistry** (the Chin. Chem. Soc., Taipei), 2008, 66, No3, 231-240.
- 62. Kamlesh Shrivas, Hui-Fen Wu*, Quantitative bioanalysis of quinine by AP-MALDI/MS assisted with dynamic drop-to-drop solvent microextraction, **Analytica Chimica Acta**, 2007, Dec, 605, 153-158. (IF4.555, 5/73, 6.85%, Times cited 18).
- 63. Bih-Show Lou, Yuan-Chin Chen Hui-Fen Wu*, Probing the non-covalent binding interaction of Na⁺ channel inactivation gate peptide in linker between domain III and IV with 5,5-diphenyhydantoin drug in Electrospray/Ion Trap Tandem Mass Spectrometry, **Rapid Communications in Mass Spectrometry**, 2007, Dec, 21, 2795-3802 (Times cited 1).
- 64. Kamlesh Shrivas, Hui-Fen Wu*, Rapid determination of caffeine in one drop of beverages and foods using drop to drop solvent microextraction with gas chromatography/mass spectrometry, **Journal of Chromatography A**, 2007, Nov, 1170, 9-14. (IF4.531, 6/73, 8.22%, Times cited 27).
- 65. Kavita Agrawal, Hui-Fen Wu*, Drop-to-drop solvent microextraction coupled with gas chromatography mass spectrometry for rapid determination of trimeprazine in urine and blood of rats: application to pharmacokinetic studies. **Rapid Communications in Mass Spectrometry**, 2007, Oct, 21, 3352-3356. Times cited 13.
- 66. Shuchen Hsieh*, Hsin-Yi Ku, Yao-Tang Ke, Hui-Fen Wu*, Self-Assembled Monolayer Modified Silicon Substrate to enhance the sensitivity of peptide detection for AP-MALDI Mass Spectrometry. **Journal of Mass Spectrometry**, 2007, Dec, 42, 1628-1636. (Times cited 11).
- 67. Kamlesh Shrivas, Hui-Fen Wu*, A Rapid, Sensitive and Effective Quantitative Method for Simultaneous Determination of Cationic Surfactant mixtures from River and Municipal Waste Water by Direct Combination of Single Drop Microextraction with AP-MALDI Mass Spectrometry **Journal of Mass Spectrometry**, 2007, Dec, 42, 1637-1644. (Times cited 18).
- 68. Kamlesh Shrivas, Hui-Fen Wu*, Single drop microextraction as a concentrating probe for rapid screening of low molecular weight of drugs from human urine using AP-MALDI Mass Spectrometry. **Rapid Communications in Mass Spectrometry**, 2007, Sep, 21, 3103-3108. (Times cited 26).
- 69. Ramaiyan Sekar, Hui-Fen Wu*. Quantification method for analysis of monensin in soil, water and urine by direct combining single drop microextraction with atmospheric pressure matrix assisted laser desorption/ionization mass spectrometry. **Analytical Chemistry**, 2006, Sep, 78, 6306-6313. (Times cited 26).
- 70. Hui-Fen Wu*, Jih-Hao Yen, Chen-Che Chin, Combining drop to drop solvent microextraction (DDSME) with gas chromatography/mass spectrometry using electronic ionization and

- self-ion/molecule reaction method to determine methoxyacetophenone isomers in one drop of water. **Analytical Chemistry**, 2006, 78, 1707-1712. (Times cited 31).
- 71. Hui-Fen Wu*, Chi-Hsien Lin. Direct combination of immersed single-drop microextraction with atmospheric pressure matrix-assisted laser desorption/ionization tandem mass spectrometry for rapid analysis of a hydrophilic drug via hydrogen-bonding interaction and comparison with liquid-liquid extraction and liquid-phase microextraction using a dual gauge microsyringe with a hollow fiber. **Rapid Communications in Mass Spectrometry**, 2006, Aug, 20, 2511-2515. (Times cited 20).
- 72. Bin-Wei Lai, Bo-Ming Liu, Pradip Malik, Hui-Fen Wu*, Combination of Liquid-Phase Hollow Fiber Membrane Microextraction with Gas Chromatography/Negative Chemical Ionization Mass Spectrometry for the Determination of Dichlorophenol Isomers. **Analytica Chimica Acta.** 2006, Aug, 576, 61-66. (Times cited 20).
- 73. N. Rahman*, S.N.H. Azmi, H. F. Wu, The importance of impurity analysis in pharmaceutical products: an integrated approach, **Accreditation and Quality Assurance**, Springer Verlag, 2006, 11, 69-74.
- 74. Putty Sudhir, Hui-Fen Wu*, Zi-Chong Zhou, identification of peptides using gold nanoparticles-assisted single drop microextraction coupled with AP-MALDI mass spectrometry. **Analytical Chemistry**, 2005, 77, 7380-7385. (Times cited 60).
- 75. Putty Sudhir, Hui-Fen Wu*, Zi-Chong Zhou, An application of electrospray ionization tandem mass spectrometry to probe the interaction of Ca⁺²/Mg⁺²/Zn⁺² and Cl⁻ with gramicidin A, **Rapid Communications in Mass Spectrometry**, 2005, 19, 1517-1521. (Times cited 9).
- 76. Putty Sudhir, Hui-Fen Wu*, Zi-Chong Zhou, Probing the interaction of kojic acid antibiotics with iron (III) chloride by using electrospray tandem mass spectrometry, **Rapid Communications in Mass Spectrometry**, 2005, 19, 209-212. (Times cited 4).
- 77. Hui-Fen Wu*, Developing chemical ionization, host-guest chemistry, self- ion/molecule reaction, single drop microextraction and electrospray mass spectrometry in an ion trap mass spectrometry, **Chemistry (the Chin. Chem. Soc., Taipei)**, 2004, 62, 443-450.
- 78. Chih-Hao Yan, Hui-Fen Wu*, A Liquid-Phase Microextraction Method, combining a Dual Gauge Microsyringe with a Hollow Fiber Membrane for the determination of Organochlorine Pesticides in Water by Gas Chromatography/Ion Trap Mass Spectrometry. **Rapid Communications in Mass Spectrometry**, 2004, 18, 3015-3018. (Times cited 27).
- 79. Nadeem Khan, Hui-Fen Wu*, Analysis of silymarin extracted from commercial dosage forms by combining liquid-liquid extraction with negative electrospray tandem mass spectrometry. **Rapid Communications in Mass Spectrometry**, 2004, 18, 2960-2962. (Times cited 5).
- 80. Bo-Ming Liu, Pradip Malik, Hui-Fen Wu*, Single-Drop Microextraction and Gas Chromatography-Mass Spectrometric Determination of Anisaldehyde Isomers in Human Urine and Blood Serum. **Rapid Communications in Mass Spectrometry**, 2004, 18, 2059-2064. (Times cited 21).
- 81. Hui-Fen Wu*, Pei-Yi Lin, Ethylenediamine as a liquid reagent to probe the hydrogen bonding and host guest interaction with crown ethers in an Ion Trap Tandem Mass Spectrometer, **Rapid Communications in Mass Spectrometry**, 2004, 18, 1365-1373.
- 82. Hui-Fen Wu*, Chien-Hung Chen, Meng-Ting Wu, Observation of Self Ion Molecule Reaction during collisionally activated dissociation in an ion trap mass spectrometer, **Journal of Mass Spectrometry**, 2004, 39, 396-401.
- 83. Leo Brewer*, Kiran Krushwitz, Robert Lamoreaux, Hui-Fen Wu, Properties of valuable new intermetallics: Brewer–Engel model applied to the bonding of transition metal dialuminides, **Intermetallics**, 2003, 11, 1103-1109.
- 84. Hui-Fen Wu*, Wen-Feng Wu, Comparing differentiation of xylene isomers by electronic ionization, chemical ionization and Self-Ion/Molecule Reactions and the first observation of methyne addition ions for xylene isomers in Self-Ion/Molecule Reactions for non-nitrogenated compounds, **Rapid Communications in Mass Spectrometry**, 2003, 17, 2399-2406.
- 85. Hui-Fen Wu*, Chien-Hung Chen, Li-Chi Lu, Probing the Reaction Mechanisms of Self Ion/Molecule Reaction for Dopamine in an Ion Trap Mass Spectrometer, **Rapid Communications** in Mass Spectrometry, 2003, 17, 1479-1482.
- 86. Hui-Fen Wu*, Pei-Yi Lin, Probing the Effects of Reagent Gas Pressure and Ion Source Temperature

- for Dimethyl Ether Chemical Ionization of Tricyclic Antidepressants in an External Source Ion Trap Mass Spectrometer, **J. Chin. Chem. Soc.**, 2003, 50, 1251-1257.
- 87. Hui-Fen Wu*, Yu-Jie Chuan, Isomer Differentiation by Combining Gas Chromatography, Selective Self–Ion/ Molecule Reaction and Tandem Mass Spectrometry in an Ion Trap Mass Spectrometer, **Rapid Communications in Mass Spectrometry**, 2003, 17,1030-1036.
- 88. Hui-Fen Wu*, Yen-Ren Chen, Bin-Wei Lai, Novel observation of total ion chromatogram (TIC) splitting under positive chemical ionization in an external source Ion Trap Mass Spectrometer, **Journal of Mass Spectrometry**, 2003, 38,458-459.
- 89. Hui-Fen Wu*, Li-Chi Lu, 2002 年諾貝爾化學獎—質譜儀分析技術的突破, 開展生化科技新領域, 科學發展月刊, 2003, 361, 50-53.
- 90. Hui-Fen Wu*, Shuen-Ming Huang, Chun-Fu Wu, Conformational Analysis and Binding Affinity Determination for Host-Guest Complexation of Alkali Metal Ion with Bis (Crown Ether)s by Electrospray Mass Spectrometry and Molecular Modeling, **European Journal of Mass Spectrometry**, 2002, 8, 375-380.
- 91. Hui-Fen Wu*, Chien-Hung Chen, Hydroxide and oxygen atom attachment to dichlorophthalic anhydride in negative ion chemical ionization with collisionally activated dissociation in an external source ion trap mass spectrometer, **European Journal of Mass Spectrometry**, 2002, 8, 329-332.
- 92. Hui-Fen Wu*, Li-Wei Chen, Chien-Hung Chen, Probing the Reactive Sites for Ion/Molecule Reactions of Anthraquinones with Dimethyl Ether by an External Source Ion Trap Tandem Mass Spectrometer and Computational Chemistry, **Rapid Communications in Mass Spectrometry**, 2001, 15, 1977-1987.
- 93. Hui-Fen Wu*, Ming-Yi Ho, Selective Self Ion / Molecule Reactions in Both External and Internal Source Ion Trap Mass Spectrometers, **Rapid Communications in Mass Spectrometry**, 2001, 15, 1309-1316.
- 94. Hui-Fen Wu*, Chien-Hung Chen, Ming-Yi Ho, Examination of the Best Pressure Range for Ion/Molecule Reactions of Anthraquinones in an External Source Ion Trap Mass Spectrometer. **Analytical Sciences**, 2001, 17, 515-518.
- 95. Hui-Fen Wu*, Li-Wei Chen, Jhen-Chen Wang, Ya-Ping Lin, Simulation of the Collisional Cooling Effect for Binary and Ternary Buffer Gas Mixtures in a Quadrupole Ion Trap Mass Spectrometer. **European Journal of Mass Spectrometry**, 2001, 7, 1-6.
- 96. Hui-Fen Wu*, Study of Temperature and Pressure Effect of Negative Chemical Ionization Mass Spectrometry Using Methane and Oxygen as Reagent Gases in an External Source Ion Trap Mass Spectrometer, **Journal of Mass Spectrometry**, 2000, 35, 1049-1050.
- 97. Hui-Fen Wu*, Ya-Ping Lin, Study of Ion-Molecule Reactions and Collisionally Activated Dissociation of Dopamine and Adrenaline by an Ion Trap Mass Spectrometer with an External Ionization Source. **European Journal of Mass Spectrometry**, 2000, 6, 65-77.
- 98. Hui-Fen Wu*, Li-Wei Chen, Ya-Ping Lin, Simulation of Collisional Cooling Effect in a Quadrupole Ion Trap Mass Spectrometer. **Journal of the Chinese Chemical Society**, 1999, 46, 923-932.
- 99. Hui-Fen Wu*, Ya-Ping Lin, Determination of Sensitivity of the External Source Ion Trap Tandem Mass Spectrometer Using Dimethyl Ether Chemical Ionization. **Journal of Mass Spectrometry**, 1999, 34, 1283-1285.
- 100. Hui-Fen Wu*, Li-Wei Chen, Study of Host-Guest Complexation of Alkaline Ion, Aluminum Ion and Transition Metal Ions with Crown Ethers by Fast Atom Bombardment Mass Spectrometry. **Journal of the Chinese Chemical Society**, 1998, 45, 689-699.
- 101. Leo Brewer*, Hui-Fen Wu, Parameters for Calculation of Properties of Acid-Base Intermetallics". Proc.-Electrochem. Soc., Volume: 1997, 97-39, number: **High Temperature Materials Chemistry**, p60-69, (CA:128(7)80209z).
- 102. Hui-Fen Wu, Leo Brewer*, Calculation of Thermodynamic Effect of the Brewer-Engel Generalized Acid Base Reactions of the 1:1 Intermetallics for Nontransition Metals Al, Mg with Transition Metals. **Journal of Alloys and Compounds**, 1997, Jan, 247,1-8. (Times cited 8).
- 103. Erwen Alvarez, Hui-Fen Wu, Chien-Chung Liou and Jennifer Brodbelt*, 1996, "Collisionally Activated Dissociation of Transition Metal Ion/Polyether Complexes in a Quadrupole Ion Trap". **Journal of the American Chemical Society**, 118, 9131-9138.
- 104. Hui-Fen Wu, Leo Brewer*, Calculation of Binary Phase Diagrams of Refractory Metals Ta, W, Tc

- and Re with Liquid Metals Am, Cm, and Bk by Using a Modification of Regular Solution Theory. **Journal of Phase Equilibria**, 1996, Feb, 17, 36-39 (Times cited 2).
- 105. Chien-Chung Liou, John Isbell, Hui-Fen Wu. Jennifer Brodbelt*, R. A. Bartsch, J. C. Lee and J. L. Hallman, 1995, April, "Structually- Selective Gas-Phase Ion-Molecule Reactions of Dibenzo-16-Crown-5 Compounds" **Journal of Mass Spectrometry**, 30, 572-580.
- 106. Hui-Fen Wu, Jennifer Brodbelt*, 1995, "Gas-Phase Chelation Reactions of Monopositive Cations with Heteroaromatic Ligands". **Inorganic Chemistry**, 34, 615 –621.
- 107. Hui-Fen Wu, Jennifer Brodbelt*, 1994, "Influence of Heteroatom Donors on the Orders of Relative Gas-Phase Binding Affinities of Macrocyclic Polyethers". **Journal of Inclusion Phenomena and Molecular Recognition in Chemistry**,18,37-44(Cited by CrossRef: http://www.springerlink.com/content/m25k548h270p5x00/)
- 108. Hui-Fen Wu, Jennifer Brodbelt*, 1994, "The Gas-Phase Complexation of Monovalent Alkaline Earth Metal Ions with Polyethers: Comparision to Alkali Metal Ion and Aluminum Ion Complexation". **Journal of The American Chemical Society**, 116,6418-6426.
- 109. Chien-Chung Liou, Hui-Fen Wu, Jennifer Brodbelt*, "Hydrogen-Bonding Interactions in Gas-Phase Polyether/Ammonium Ion-Complexes". **Journal of The American Society for Mass Spectrometry**, 1994, 5, 260-273.
- 110. Hui-Fen Wu, Jennifer Brodbelt*, "Comparison of the Orders of Gas-Phase Basicities and Ammonium Ion Affinities of Polyethers by the Kinetic Method and Ligand Exchange Technique." **Journal of The American Society for Mass Spectrometry**, 1993, 4,718-722.
- 111. Hui-Fen Wu, Jennifer Brodbelt*, "Effects of Reaction Ion Kinetic Energy on Both Endothermic and Exothermic Ion/Molecule Reactions in a Quadrupole Ion Trap Mass Spectrometer." **International Journal of Mass Spectrometry and Ion Processes**, 1993, 124,175-184.
- 112. Hui-Fen Wu, Jennifer Brodbelt*, "Effects of Collisional Cooling on Ion Detection in a Quadrupole Ion Trap Mass Spectrometer". **ICR/Ion Trap Newsletter**, 1992, 25,22-24.
- 113. Hui-Fen Wu, Jennifer Brodbelt*, "Effects of Collisional Cooling on Ion Detection in a Quadrupole Ion Trap Mass Spectrometer". **International Journal of Mass Spectrometry and Ion Processes**, 1992, 115,67-81.

研討會論文/邀請演講:

- •Hui-Fen Wu*, Crossing domains of nanotechnology, microbiology and mass spectrometry for pathogenic bacteria, The 4th World Chinese Mass spectrometry conference and 2012 Taiwan society for mass spectrometry, June 28 -July1st, 2012, Taiwan. Invited Talk.
- •Suresh Kumar Kailasa, Nazim Hasan, Hui-Fen Wu*, Identification of multiply charged proteins and amino acid clusters by liquid nitrogen assosted spray ionization mass spectrometry, The 4th World Chinese Mass spectrometry conference and 2012 Taiwan society for mass spectrometry, June 28 -July1st, 2012, Taiwan. Poster presentation.
- •L.N.Jayaram, Judy Gopal, Jhih-Huan Huang, Hui-Fen Wu*, Staphylococcus aureus wound infection kinetics probed by direct MALDI-MS using murine models, The 4th World Chinese Mass spectrometry conference and 2012 Taiwan society for mass spectrometry, June 28 -July1st, 2012, Taiwan. Poster presentation.
- •Judy Gopal, Hui-Fen Wu*, M.Manikandan, Nanoparticle driven mass sensore for rapid, simple, direct and sensitive detection of microorganisms from clinical, environmental and food samples. The 4th World Chinese Mass spectrometry conference and 2012 Taiwan society for mass spectrometry, June 28 -July1st, 2012, Taiwan. Poster presentation.
- •Judy Gopal, Chia-Hsun Lee, Pei-yang, Hui-Fen Wu*, Tracing the in vivo kinetics of pathogenic bacterial infection from mouse blood and urine using direct MALDI-MS analysis. The 4th World Chinese Mass spectrometry conference and 2012 Taiwan society for mass spectrometry, June 28 -July1st, 2012, Taiwan. Poster presentation.
- •M. Manikandan, Hui-Fen Wu*, Nazim Hasan, Platinum nanodots assisted cell population based mass spectrometry of Chlamydomonas and yeast cells. The 4th World Chinese Mass spectrometry conference and 2012 Taiwan society for mass spectrometry, June 28 -July1st, 2012, Taiwan. Poster presentation.
- •Gangaraju Gedda, Judy Gopal, Hui-Fen Wu*, ESI-MS and MALDI-MS analysis of

- extrapolysaccharides of E.coli. The 4th World Chinese Mass spectrometry conference and 2012 Taiwan society for mass spectrometry, June 28 -July1st, 2012, Taiwan. Poster presentation.
- ●Hui-Fen Wu*, Crossing domains of nanotechnology, microbiology and analytical chemistry, NSYSU & UCSD Joint Symposium, May 19-23, 2012, 中山大學. Invited Speaker.
- ●Judy Gopal, Nazim Hasan, H. F. Wu*, Fabrication of TiO₂ nanoparticle thin film on titanium surfaces for application as bacterial sensor/biochip for rapid, sensitive and direct analysis of pathogenic bacteria using MALDI-MS, Nano 2012, International Conference & exhibition on nanotechnology & nanomedicine Omics Group, March 12th-14th, Omaha, Nebraska. US. Oral presentation.
- M. Manikandan, Nazim Hasan, H. F. Wu*, Nanoparticle assisted enhanced biosynthesis of haloarchaeal caroteinoid pigments: Preconcentration of pigments through Pt nanoparticle based liquid liquid microextraction for MALDI-MS analysis. Nano 2012, International Conference & exhibition on nanotechnology & nanomedicine Omics Group, March 12th-14th, Omaha, Nebraska. US. Oral presentation.
- •Hui-Fen Wu*, Annual Retreat of the Marine Biotechnology Degree Program, Jan 16, 2012, Invited Speaker.
- ●H. F. Wu*, J. Gopal, C. H. Lee, Rapid and direct detection of invivo kinetics of pathogenic bacterial infection from mouse blood and urine. 第 2 屆分析蛋白質體年會.The second International Congress on Analytical Proteomics, Ourense, Spain. July 18-20, 2011. Invited Speaker and evaluation panel for bacteria/animal for the speech/poster awards.
- ●Judy Gopal, Jayaram Narayan, Hui-Fen Wu*, TiO2 nanoparticle assisted mass spectrometry for affinity capture of Staphylococcus aureus, the predominant nosocomial pathogen from air, skin surface and human nasal passage. 第 2 屆亞洲及太平洋質譜會議.The 2th Asian and Oceanic Mass Spectrometry Conference. Aug. 17-19, 2011, Busan, Korea.
- ●Chia-Hsun Lee, Judy Gopal, Hui-Fen Wu*, BCrO4²⁻ ionic liquid applied in bacterial analysis from fresh and spoilt yogurt.第十七屆分析技術交流研討會, May14-15, 2011.中興大學.
- ●Hui-Fen Wu*, Nanomaterials, liquid phase microextraction and mass spectrometric techniques for application in marine biology. 2011, May 5, 台灣大學演講.
- ●Hui-Fen Wu*,台俄開發蛋白質體學研究之新穎質譜法研討會, Probing the dual personality of ZnO and Ag nanoparticles in bacteria analysis in MALDI Mass Spectrometry, April 26, 2011, 中山大學. Invited Speaker.
- ●Chia-Hsun Lee, Judy Gopal, Hui-Fen Wu*, Mass Spectrometry enabled by a novel Cr6+ containing ionic solution as biosensor of yogurt bacteria. 第八屆台灣質譜年會暨學術研討會, July 10-12, 2011, Sinica.
- ●Hui-Fen Wu*, Sample pretreatment free mass spectrometry based on nanomaterials,第六屆海峽兩岸分析化學會議.Sep. 9-10, 2010, Da-Lien, China. Invited Speaker.
- ●Hui-Fen Wu*, Applications of multifucntional quantum dots and nanoparticle mass spectrometry,台灣質譜學會夏季專題研討會-奈米材料與質譜分析技術, Aug. 13, 2010, 交通大學. Invited Speaker.
- ●Hui-Fen Wu*, Nanoprobe based mass spectrometry. 第三屆世界華人質譜研討會, 2010 年 7 月 30 日 -8 月 1 日,吉林省長春市. Invited Speaker.
- ●Hui-Fen Wu*, 1. Multifunctional nanomaterials for rapid protein and peptide analysis in MALDI, ESI and liquid nitrogen spray mass spectrometry 2. Nanoparticles in ionic liquid-single drop microextraction for highly sensitive and background free detection of bacteria from human plasma in MALDI-MS. 2010, July 27, 台灣大學化學系演講.
- ●Nazim Hasan, Hui-Fen Wu*, Yi-Hsien Li, Mohd Nawaz, Two step-on particle ionization/enrichment via washing and separation free approach: multifunctional TiO₂ nanoparticles as desalting, accelerating and affinity probes for microwave-tryptic digestion of phosphoproteins in ESI and MALDI-MS: comparing to microscale TiO₂, 第7屆台灣質譜年會暨學術研討會, 2010, June 27-29, 高雄醫學大學.
- ●Suresh Kumar Kailasa and Hui-Fen Wu*, Interference free detection for small molecules: Probing the Mn²⁺-doped effect and cysteine capped effect on the ZnS nanoparticles for coccidiostats and peptide analysis in SALDI-TOF MS, 第7屆台灣質譜年會暨學術研討會, 2010, June 27-29,高雄

- 醫學大學.
- ●Lokesh Shastri, Suresh Kumar Kailasa, Hui-Fen Wu*, Nanoparticle-single drop microextraction as multifunctional and sensitive nanoprobes: Binary matrix approach for gold nanoparticles modified with (4-mercaptophenyliminomethyl)-2-methoxyphenol for peptide and protein analysis in MALDI-TOF MS 第 7 屆台灣質譜年會暨學術研討會, 2010, June 27-29, 高雄醫學大學.
- ●Suresh K. Kailasa, Hui-Fen Wu*, Multifunctional ZrO₂ nanoparticles and ZrO₂@SiO₂ nanorods for improved MALDI-MS analysis of cyclodextrin, peptide and phosphoprotein. 第 7 屆 台灣質譜年會暨學術研討會, 2010, June 27-29, 高雄醫學大學.
- ●Hui-Fen Wu*, Multifunctional nanomaterials for rapid protein and peptide analysis in MALDI and ESI mass spectrometry.第 58 屆日本質譜年會暨第一屆亞太質譜年會.1st Asian and Oceanic Mass Spectrometry Conference, Japan. Tsukuba, 2010, June 16-18. Invited Speaker.
- ●Suresh Kailasa, Hui-Fen Wu*, Improvement of signal intensities for protein analysis with cadmium sulphide nanomaterials as the matrix in MALDI-TOF-MS.第 58 屆日本質譜年會暨第一屆亞太質譜年會.1st Asian and Oceanic Mass Spectrometry Conference, Japan. Tsukuba, June 16-18, 2010.
- ●Nazim Hasan, Hui-Fen Wu*, Highly selective and sensitive enrichment of phosphopeptides via NiO nanoparticles using microwave assisted centrifugation-on particles ionization/enrichment approach in MALDI-MS. 第 58 屆日本質譜年會暨第一屆亞太質譜年會.1st Asian and Oceanic Mass Spectrometry Conference, Japan. Tsukuba, June 16-18, 2010.
- ●Yi-Hsien Lee, Nazim Hasan, Hui-Fen Wu*, Two-step on-particle ionization/enrichment via a washing- and separation-free approach for phosphopeptide analysis in ESI and MALDI-MS.第十六屆分析化學技術交流研討會,2010,5月15,16日,台灣大學化學系.
- ●Hui-Fen Wu*, Multifunctional quantum dots and nanomaterials for rapid protein and peptide analysis in the MALI-MS, 98 年中國化學會年會, 2009 年 12 月 5, 6 日,義守大學. Invited Speaker.
- Nawaz, Mohd; Shastri, Lokesh; Wu, Hui-Fen*, Bifunctionalized capped Silver nanoparticle coupled Single Drop Microextraction as a high affinity probe for protein and biomolecules analysis in MALDI-TOF MS, 18th International Mass Spectrometry Conference, Aug. 30-Sep. 4, 2009, Bremen, Germany.
- •H. F. Wu*, S. Kailasa, S. Lokesh, Synthesis of Electrostatically Self Assembled Azide Stabilized ZnS Nanoparticles as Affinity Probes for Enrichment, Desalting and Rapid Analysis of Peptides and Proteins by direct MALDI-TOF MS. 18th International Mass Spectrometry Conference, Aug. 30-Sep. 4, 2009, Bremen, Germany.
- Hasan, Nazim; Lee, Yi Hsieh; Mohd Nawaz; Wu, Hui-Fen*, Trifunctional TiO2 nanoparticles for acceleration, desalting and enrichment of microwave-digested proteins and phosphoproteins via ESI and MALDI-TOF mass spectrometry analysis. 18th International Mass Spectrometry Conference, Aug. 30-Sep. 4, 2009, Bremen, Germany.
- ●Hui-Fen Wu*, Applications of multifunctional quantum dots and nanomaterials as the matrix, affinity probes, acceleration for microwave digestion, desalting approach, liquid phase microextraction probes and improved resolution for rapid protein and peptide analysis in the MALDI-MS.台灣質 普學會學術研討會暨 2009 質譜年會, 2009 年 6 月 25-26 日,中興大學. Invited Speaker.
- ●Kamlesh Shrivas, Suresh Kailasa, Hui-Fen Wu*, Quantum dots laser desorption/ionization MS: multifunctional CdSe quantum dots as the matrix, concentrating probes and acceleration for microwave enzymatic digestion for peptide analysis and high resolution detection of proteins in a linear MALDI-TOF MS. 台灣質譜學會學術研討會暨 2009 質譜年會, 2009 年 6 月 25-26 日,中興大學.
- ●Lokesh Shastri, Suresh Kailasa, Hi-Fen Wu*, Cysteine capped ZnSe quantum dots as affinity and accelerating probes of microwave enzymatic digestion for proteins via direct MALDI-TOF MS analysis. 台灣質譜學會學術研討會暨 2009 質譜年會, 2009 年 6 月 25-26 日,中興大學.
- ●Shu-Ray Kuo, Hui-Fen Wu*, 硫化鉛量子點輔助雷射脫附游離質譜法在蛋白質及小分子化合物的應用, 台灣質譜學會學術研討會暨 2009 質譜年會, 2009 年 6 月 25-26 日,中興大學.
- ●Hui-Fen Wu*, Multifunctional quantum dots and nanoparticles for rapid protein and peptide analysis in the matrix Assisted Laser Desorption/Ionization Mass Spectrometry. 2009, June 17, 清華大學

- 化學系演講.
- ●Shu-Ray Kuo, Hui-Fen Wu*, 功能性鉑奈米粒子在雷射脫附質譜法上的應用,分析化學技術交流研討會. 2009.
- ●Hui-Fen Wu*, Functional Group Effects of ZnS Semiconductor Nanoparticles as the Matrix and Nanoprobes for Rapid Analysis of Biological Samples and Mushroom in MALDI-TOF Mass Spectrometry. 97 年度中國化學會年會. 2008, 12 月 5 ~ 7 日,彰化師範大學. Invited Speaker.
- ●Putty-Reddy Sudhir, Kamlesh Shrivas, Zi-Cong Zhou, Hui-Fen Wu*, Single drop microextraction using silver nanoparticles as electrostatic probes for peptide analysis in AP-MALDI/MS and comparison with gold electrostatic probes and silver hydrophobic probes, 2008 International Chemical Conference, Taipei: Analytical Chemistry. 2008, Oct.2-5, 中山大學化學系.
- ●Chih-Hao Yang, Nadeem Khan, Hui-Fen Wu*, Differentiation and quantification of xylene isomers by combining headspace solid-phase microextraction/gas chromatography and self-ion molecule reaction in an ion trap tandem mass spectrometry. 2008 International Chemical Conference, Taipei: Analytical Chemistry. 2008, Oct.2-5,中山大學化學系.
- ●Kamlesh Shrivas, Hui-Fen Wu*, Applications of silver nanoparticles capped with different functional groups as the matrix and affinity probes in SALDI-TOF and AP-MALDI- ion trap mass spectrometry for rapid analysis of sulphur drugs and biothiols in human urine. 2008 International Chemical Conference, Taipei: Analytical Chemistry. 2008, Oct.2-5, 中山大學化學系.
- ●Kamlesh Shrivas, Hui-Fen Wu*, Functionalized multiwalled carbon nanotubes as a preconcentrating probe for rapid monitoring of cationic dyestuffs in environmental water using AP-MALDI/MS. 2008 International Chemical Conference, Taipei: Analytical Chemistry. 2008, Oct.2-5, 中山大學化學系.
- •Hui-Fen Wu*, Kamlesh Shrivas, Single drop microextraction using silver nanoparticles as electrostatic probes for peptide analysis in AP-MALDI/MS and comparison with gold electrostatic probes and silver hydrophobic probes. HUPO 7th Annual World Congress 2008. Aug. 16-20, Amsterdam, Netherlands.
- ●Hui-Fen Wu*, 第 2 屆世界華人質譜研討會暨 2008 台灣質譜年會, 2008 年 6 月 26-27 日, Sinica. Page 77-86.
- •Hui-Fen Wu*, Modified Silver Nanoparticle as a hydrophobic affinity probe for analysis ofpPeptides and proteins by using MALDI Mass Spectrometry. 56th ASMS Conference On Mass Spectrometry and Allied Topics, Denver, Colorado, 2008, June 1 5.
- ●Hui-Fen Wu*, Kamlesh Shrivas, Modified Silver Nanoparticle as a Hydrophobic Affinity Probe for Rapid Analysis of Peptide and Proteins in Biological Samples by using Liquid-Liquid Microextraction coupled to MALDI Mass Spectrometry,第五屆兩岸分析化學研討會暨第十四屆分析技術交流研討會,2008年5月24-25日,高雄醫學大學. Invited Speaker.
- ●Hui-Fen Wu*, 1. Novel liquid phase microextraction techniques coupled to mass spectrometry for pharmacokinetic study, environmental and protein analysis 2. Application of nano-particles on mass spectrometry, 2008, Jan. 9, 中山醫學大學化學系演講.
- ●Hui-Fen Wu*, Hsin-Yi Ku, Jyh-Hao Yen, A liquid phase microextraction method using a micro pipette with disposable tips as a concentrating probe for rapid analysis and quantitative determination of nortriptyline drug from biological matrices in the AP-MALDI mass spectrometry, 96 年中國化學會年會暨第十一屆台北國際化學會議, 2007, Dec.14-16, 清華大學化學系.
- ●Shuchen Hsieh*, Hsin-Yi Ku, Yao-Tang Ke, Hui-Fen Wu*, Self-Assembled Monolayer Modified Silicon Substrate to enhance the sensitivity of peptide detection for AP-MALDI Mass Spectrometry. 96 年中國化學會年會暨第十一屆台北國際化學會議, 2007, Dec.14-16, 清華大學化學系.
- ●Hui-Fen Wu*, 1. Novel liquid phase microextraction techniques coupled to mass spectrometry for pharmacokinetic study, environmental and protein analysis 2. Application of nano-particles on mass spectrometry. 2007 年 11 月 22 日. 台灣大學化學系演講.
- ●Yuan-Chin Chen, Hui-Fen Wu*, 大氣壓基質輔助雷射脫附質譜法結合一滴溶劑微量萃取技術直接對魚體組織作藥物的定量分析.第四屆台灣質譜年會暨國際學術交流研討會, 2007 年 6 月 29 ~ 30 日. 成功大學.

- ●Kavita, Feng-Tsain Chung, Hui-Fen Wu*, Atmospheric Pressure Matrix Assisted Laser Desorption/Ionization Mass Spectrometry with Micelle-Assisted Solvent Microextraction for Rapid Analysis of Thiopeptide. 第四屆台灣質譜年會暨國際學術交流研討會, 2007年6月29~30日. 成功大學.
- ●Kamlesh Shrivas, Hui-Fen Wu*, A rapid, sensitive and effective quantitative method for simultaneous determination of cationic surfactant mixtures from river and municipal waste water by direct combination of single drop microextraction with AP-MALDI mass spectrometry. 第四屆台灣質 譜年會暨國際學術交流研討會, 2007 年 6 月 29 ~ 30 日. 成功大學.
- ●Kamlesh Shrivas, Hui-Fen Wu*, Single Drop Microextraction as a Concentrating Probe for Rapid Screening of Low Molecular Weight Drugs from Human Urine. 第四屆台灣質譜年會暨國際學術交流研討會, 2007年6月29~30日. 成功大學.
- ●Kamlesh Shrivas, Hui-Fen Wu*, Feng-Tsain Chung, A simple and rapid quantitative method by direct coupling drop-to-drop solvent microextraction with gas chromatography/mass spectrometry to determine caffeine in one drop of beverages and foods. 第四屆台灣質譜年會暨國際學術交流研討會, 2007年6月29~30日. 成功大學.
- ●Kamlesh Shrivas, Yuan-Chin Chen, Hui-Fen Wu*, Rapid ultrasonic extraction followed single drop microextraction combined with gas chromatography -mass spectrometry to study organochlorine pesticides from fish. 第四屆台灣質譜年會暨國際學術交流研討會, 2007年6月29~30日. 成功大學.
- ●Shuchen Hsieh, Hsin-Yi Ku, Yao-Tang Ke, Hui-Fen Wu*, 表面修飾自組裝薄膜矽基質提升大氣壓基質輔助雷射游離質譜儀上的胜肽鑑定靈敏度. 第四屆台灣質譜年會暨國際學術交流研討會, 2007年6月29~30日. 成功大學.
- ●Hsin-Yi Ku, Hui-Fen Wu*, A rapid and quantitative method for analysis of traditional Chinese medicine by combining Microwave assisted extraction followed Ultrasonic assisted Drop to Drop Solvent Microextraction with a hollow fiber coupled with AP-MALDI tandem mass spectrometry to determine Evodia rutaecarpa in one drop of urine and plasma. 第四屆台灣質譜年會暨國際學術交流研討會, 2007年6月29~30日. 成功大學.
- ●Hsin-Yi Ku, Hui-Fen Wu*, 微波萃取結合一滴溶劑一滴水樣之超微量萃取法連結大氣壓基質輔助雷射脫附質譜於中藥材黃蓮之定性定量分析. 第四屆台灣質譜年會暨國際學術交流研討會, 2007年6月29~30日. 成功大學.
- ●A desalting method using Host Guest complexation to probe the non-covalent binding interaction of Na+ channel inactivation gate peptide in linker between domain III and IV with phenytoin drug in Electrospray /Ion Trap Tandem Mass Spectrometry Spectrometry. 第四屆台灣質譜年會暨國際學術交流研討會, 2007年6月29~30日. 成功大學.
- ●Hui-Fen Wu*, Kamlesh Shrivas, Direct combination of Single Drop Microextraction with AP-MALDI Mass Spectrometry for rapid screening of low molecular weight of drugs from human urine and simultaneous determination of cationic surfactant mixtures from river and municipal waste water,第 13 屆分析技術交流研討會, 2007, May 26, 27, 清華大學. Invited Speaker.
- ●Bih-Show Lou, Yuan-Chin Chen, Hui-Fen Wu*, A desalting method using Host Guest complexation to probe the non-covalent binding interaction of Na⁺ channel inactivation gate peptide in linker between domain III and IV with phenytoin drug in Electrospray / Ion Trap Tandem Mass Spectrometry.第 13 屆分析技術交流研討會, 2007, May 26, 27, 清華大學.
- ●Yuan-Chin Chen, Hui-Fen Wu*, 旋轉式中空纖維管液相微萃取法結合氣相層析質譜儀使用電子 游離法及自身離子分子反應對異構物作定性定量分析.第 13 屆分析技術交流研討會, 2007, May 26, 27, 清華大學.
- ●謝淑貞, 古欣怡, 柯耀棠, 吳慧芬*, 表面修飾自組裝薄膜矽基質提升大氣壓基質輔助雷射游離質譜儀上的胜肽鑑定靈敏度.第13屆分析技術交流研討會, 2007, May 26, 27, 清華大學.
- ●Hui-Fen Wu*, Nanoparticle based single drop microextraction for peptide analysis and drop to drop solvent microextraction to determine isomers in one drop of water, 2007, Mar. 6, 朝陽科技大學應化系演講.
- •Bih-Show Lou, Yuan-Chin Chen, Hui-Fen Wu*, Probing the Interaction of Na+ Channel Inactivation

- Gate Peptide in Linker between Domain III and IV and Phentoin by Using Electrospray Tandem Mass Spectrometry. 95 年化學年會, 2006, Dec., 淡江大學化學系.
- ●Jyh-Hao Yen, Hui-Fen Wu*, Drop to drop solvent microextraction coupled to AP-MALDI tandem mass spectrometry for rapid analysis of a drug from one drop of human urine and human plasma. 95 年化學年會, 2006, Dec., 淡江大學化學系.
- ●Kamlesh Shrivas, Hui-Fen Wu*, A simple and rapid quantitative method by direct coupling Drop-to-Drop Solvent Microextraction with Gas Chromatography/Mass Spectrometry to determine caffeine in one drop of beverages and foods. 95 年化學年會, 2006, Dec., 淡江大學化學系.
- ●Ramaiyen Sekar, Hui-Fen Wu*, A Simple and Fast Quantitative Method for Analysis of Monensin in Soil, Water and Urine by Direct Combining Single Drop Microextraction with Atmospheric Pressure—Matrix Assisted Laser Desorption/Ionization Mass Spectrometry, 95 年化學年會, 2006, Dec., 淡江大學化學系.
- ●Hui-Fen Wu*, Chi-Hsein Lin, Combining single drop microextraction with AP-MALDI tandem mass spectrometry for rapid analysis of a peptide from biological samples. 95 年化學年會, 2006, Dec., 淡江大學化學系.
- ●Kamlesh Shrivas, Hui-Fen Wu*, Application of Atmospheric Pressure-Matrix Assisted Laser Desorption/Ionisation Mass Spectrometry in Simultaneous Quantitative Determination of Cationic Surfactants from River and Municipal Waste Water. 95 年化學年會, 2006, Dec., 淡江大學化學系.
- ●Hui-Fen Wu*, Jyh-Hao Yen, Developing a liquid phase microextraction method using a micropipet with disposable tips coupled to AP-MALDI tandem mass spectrometry for rapid drug analysis from biological matrixes. 95 年化學年會, 2006, Dec., 淡江大學化學系.
- ●Hsin-Yi Ku, Yuan-Chin Chen, Ja-Yi Yen, Hui-Fen Wu*, Separation and quantitative determination of tricyclic compounds by direct combining single-drop microextraction and micro-volume pipette extraction with Capillary electrophoresis techniques. 95 年化學年會, 2006, Dec., 淡江大學化學系.
- ●Hui-Fen Wu*, Chi-Hsien Lin, Direct combining immersed single drop microextraction with AP-MALDI tandem mass spectrometry for rapid analysis of a hydrophilic drug via hydrogen bonding interaction and comparison with LLE and LPME/DGM-HF. 95 年化學年會, 2006, Dec., 淡江大學化學系.
- •Hui-Fen Wu*, Chi-Hsien Lin, Combining single drop microextraction with AP-MALDI tandem mass spectrometry for rapid analysis of a peptide from urine and plasma. 17th International Mass Spectrometry Conference, Prague, Czech Republic, Aug 27 Sep 1, 2006.
- ●Hui-Fen Wu*, Simple and Fast Analysis of Drugs by Direct Combining Single Drop Microextraction with AP-MALDI Mass Spectrometry. 2006 臺灣質譜年會&學術研討會. 2006, June 22, 23, 中山大學. Invited Speaker.
- ●Chen-Che Chin, Hui-Fen Wu*, Combining drop-to-drop solvent microextraction with gas chromatography/ion trap-mass spectrometry using electronic ionization method to develop a quantitative method. 2006 臺灣質譜年會&學術研討會. 2006, June 22, 23, 中山大學.
- ●Jyh-Hao Yen, Hui-Fen Wu*, Liquid phase microextraction using a micropipet with disposable tips coupled to AP-MALDI tandem mass spectrometry for rapid drug analysis from urine and human plasma. 2006 臺灣質譜年會&學術研討會. 2006, June 22, 23, 中山大學.
- ●Chi-Hsien Lin, Hui-Fen Wu*, Direct combining immersed single drop microextraction with AP-MALDI tandem mass spectrometry for rapid analysis of a hydrophilic drug via hydrogen bonding interaction and comparison with LLE and LPME/DGM-HF. 2006 臺灣質譜年會&學術研討會. 2006, June 22, 23, 中山大學.
- ●吳慧芬*,嚴哲毅,林其賢,秦偵哲,劉柏敏,賴秉葦, 液相微萃取法結合質譜進行環境污染物與藥物之微量分析. 2006 臺灣質譜年會&學術研討會. 2006, June 22, 23, 中山大學.
- ●Bih-Show Lou, Yuan-Chin Chen, Hui-Fen Wu*, 利用電灑質譜探討鈉離子通道在區域三和四之間的連結物在不活化狀態時的作用力. 2006 臺灣質譜年會&學術研討會. 2006, June 22, 23, 中山大學.
- •Ramaiyen Sekar, Chen-Che Chin, Hui-Fen Wu*, A Simple and Fast Quantitative Method for Analysis

- of Monensin in Soil, Water and Urine by Direct Combining Single Drop Microextraction with Atmospheric Pressure—Matrix Assisted Laser Desorption/Ionization Mass Spectrometry, 第 13 屆 分析技術交流研討會, 2006, May 26, NKNU 大學.
- ●Hui-Fen Wu*, Nanoparticle assisted single drop microextraction coupled to atmospheric pressure matrix assisted laser desorption ion trap tandem mass spectrometry for rapid analysis of peptides. 2006, Mar. 9,成功大學化學系演講.
- ●Hui-Fen Wu*, Nanoparticle assisted single drop microextraction coupled to AP-MALDI mass spectrometry for peptide analysis and drop to drop solvent microextraction coupled with GC/MS to determine isomers in one drop of water. 2006, Feb. 22,中山大學化學系演講.
- ●Hui-Fen Wu*, Nanoparticle assisted single drop microextraction coupled to AP-MALDI ion trap tandem mass spectrometry for rapid analysis of peptides. 2006, Feb. 18, 台灣大學化學系演講. Invited Speaker.
- ●J. H. Yen, J. J. Chin, H. F. Wu*, DDSME/GC/EI/MS for quantification and DDSME/GC/SIMR/MS/MS/MS for isomer differentiation of methoxyacetophenone isomers in one drop of water and comparison with LLE, SDME, SPME and LPME/DGM-HF, 2005 年 11 月 19-20, 中國化學會年會,中山大學.
- ●H.-F. Wu*, P. Sudhir, Z. C. Zhou, Nanoparticles-assisted single drop microextraction (NPA-SDME) coupled with AP-MALDI mass spectrometry for peptide analysis, 2005 年 11 月 19-20, 中國化學會年會,中山大學.
- ●N. A. Khan, J. Y. Yan, H. F. Wu, Negative electrospray tandem mass spectrometry (MS² to MS⁴) for probing the structures of acancer drug flutamide extracted from pharmaceutical formulations by using Soxhlet apparatus, 2005 年 11 月 19-20,中國化學會年會,中山大學.
- ●P. Sudhir, H.-F. Wu*, Z. C. Zhou, A novel approach for the identification of peptides using gold nanoparticles-assisted single drop microextraction coupled with AP-MALDI mass spectrometry, 8th Asian Conference on Analytical Sciences, 94/10/16-20, 台灣大學.
- ●B. W. Lai, B. M. Liu, H.-F. Wu*, Liquid-Phase Hollow Fiber Microextraction and Gas Chromatography/Negative Chemical Ionization Mass Spectrometry for the Determination of Dichlorophenol Isomers, 8th Asian Conference on Analytical Sciences, 94/10/16-20, 台灣大學.
- ●Hui-Fen Wu*, Single drop microextraction, single drop nano particle microextraction, micro volume pipettor extraction and drop to drop solvent microextraction coupled to atmospheric pressure matrix assisted laser desorption/ionization ion trap tandem mass spectrometry for rapid analysis of drugs and biomolecules,台灣質譜學會 2005 年華人質譜學術交流研討會,94 年 6 月 16-17,中興大學. Invited Speaker.
- ●林其賢,吳昭賢,吳慧芬*,開發一滴溶劑微萃取法作為大氣壓基質輔助雷射脫附質譜法之濃縮探針以提高生化分子偵測的靈敏度.台灣質譜學會 2005 年華人質譜學術交流研討會,94 年 6 月 16-17,中興大學.
- ●嚴哲毅,秦偵哲,吳慧芬*,一滴溶劑萃取一滴樣品之超微量萃取法連結大氣壓基質輔助雷射脫附質譜並作為藥物濃縮探針的開發,台灣質譜學會 2005 年華人質譜學術交流研討會, 94 年 6 月 16-17,中興大學.
- ●C. H. Lin, J. H. Yen, H. F. Wu*, Understanding the surface reactivity of nanoparticles on formation of nanoscale cages of water clusters probed by electrospray / ion trap tandem mass spectrometry. 台灣質譜學會 2005 年華人質譜學術交流研討會,94 年 6 月 16-17,中興大學.
- ●C. H. Lin, H. F. Wu*, Combining single drop microextraction with AP-MALDI/ ion trap tandem mass spectrometry for rapid analysis of dopamine from urine and compared with LLE and LPME. 台灣質譜學會 2005 年華人質譜學術交流研討會,94 年 6 月 16-17,中興大學.
- ●J. H. Yen, C. H. Lin, B. M. Liu, H. F. Wu*, Physical adsorption of nanoscale cages of water clusters on the surfaces of iron and gold nano-particles investigated by electrospray / ion trap tandem mass spectrometry.第11 屆分析化學技術交流研討會2005/5/14, 淡江大學.
- ●C. H. Lin, H. F. Wu*, Combining single drop microextraction with atmospheric pressure matrix assisted laser desorption/ionization ion trap tandem mass spectrometry for rapid analysis of dopamine from urine. 第 11 屆分析化學技術交流研討會 2005/5/14, 淡江大學.
- •P. Sudhir, H.-F. Wu*, Z. C. Zhou, An application of AP-MALDI and ESI tandem mass spectrometry

- to characterize the structure of a peptide, gramicidin and probing the interactions of gramicidin with divalent metallic salts using ESI-tandem mass spectrometry. 第 11 屆分析化學技術交流研討會 2005/5/14, 淡江大學.
- ●R. Sekar, H.-F. Wu*, Fast separation and determination of acetophenone and its mono hydroxyl positional isomer by capillary electrophoresis. 第 11 屆分析化學技術交流研討會 2005/5/14, 淡江大學.
- ●Hui-Fen Wu*, Application of ion trap mass spectrometry on self- ion/molecule reaction, ethylene diamine chemical ionization, single drop microextraction and electrospray ionization applied to drug analysis and gramicidin binding interaction with metal ions, 2004 年 12 月 18-19 日,第 3 屆兩岸分析 化學會議,中興大學, Invited Speaker.
- ●P. Sudhir, H.-F. Wu*, Z. C. Zhou, Probing the interactions of ion channel-gramicidin ionophores with divalent metallic cations (Ca⁺², Mg⁺², Zn⁺²) using electrospray tandem mass spectrometry. 93 年 11 月 19-21, 中國化學會年會,中興大學.
- P. Sudhir, H.-F. Wu*, Z. C. Zhou, Probing the interaction of kojic acid antibiotics with iron by using electrospray tandem mass spectrometry. 93 年 11 月 19-21, 中國化學會年會,中興大學.
- C.-H. Lin, B.-M. Liu, H.-F. Wu*, Formation of magic number of nano water clusters by iron nano-particles detected by electrospray tandem mass spectrometry. 93 年 11 月 19-21,中國化學會年會,中興大學.
- N. A. Khan, H.-F. Wu*, Analysis of silymarin extracted from commercial dosage forms by combining liquid-liquid extraction with negative electrospray tandem mass spectrometry. 93 年 11 月 19-21,中國化學會年會,中興大學.
- C.-H. Lin, N. A. Khan, H.-F. Wu*, A rapid and efficient method to analyze the commercial ginseng mixtures by using electrospray tandem mass spectrometry. 93 年 11 月 19-21,中國化學會年會,中興大學.
- 嚴哲毅, 劉柏敏, 吳慧芬*, 電灑質譜儀及固相微萃取結合氣相層析質譜於檢測血清中市售維他命 E, 93 年 11 月 19-21,中國化學會年會,中興大學.
- B. M. Liu, H. F. Wu*, Combining Single-Drop Microextraction with chemical ionization to detect anisaldehyde isomers in urine and blood. 93 年 11 月 19-21,中國化學會年會,中興大學.
- L. C. Lu, N. A. Khan, H-F Wu*, Combining Single-Drop Microextraction with self-ion/molecule reaction to differentiate isomers in one drop of water solution. 93 年 11 月 19-21,中國化學會年會,中興大學.
- ●H-F Wu*, C. H. Yan, N. A. Khan, Differentiation and quantification of xylene isomers by combining headspace solid phase microextraction, gas chromatography, Self-Ion Molecule Reaction and tandem mass spectrometry. 93 年 11 月 19-21,中國化學會年會,中興大學.
- ●H. F. Wu*, C. H. Yan, A Single-Drop Microextraction method by combining a dual gauge microsyringe with a hollow fiber to detect pesticide in water. 93 年 11 月 19-21,中國化學會年會,中興大學.
- ●B. M. Liu, B. W. Lai, H. F. Wu* Single-Drop Microextraction with a hollow fiber and Gas Chromatography/Electron Capture Detection Mass Spectrometry to detect dichlorophenols in urine. 93 年 11 月 19-21,中國化學會年會,中興大學.
- ●N. A. Khan, L-C Lu, C-H Lin, B-M Liu, H-F Wu, Novel observation of Cluster ions of water by reactions of metallic nano-particles with water and organic solvents detected by electrospray mass spectrometry, 93 年度台灣質譜學會年會, 93/6/15-16.台灣大學.
- ●Nadeem Ahmad Khan, Li-Chi Lu, Hui-Fen Wu*, Electrospray Mass spectrometry as an important tool for probing the reaction mechanisms of oxidation of dopamine with potassium permanganate in basic medium, 93 年度台灣質譜學會年會, 93/6/15-16.台灣大學.
- ●Hui-Fen Wu*, Meng-Ting Wu, Chien-Hung Chen, Self Ion / Molecule Reaction to produce the protonated molecules during collisionally activated dissociation in an ion trap, 93 年度台灣質譜學會年會, 93/6/15-16.台灣大學.
- ●H-F Wu*, Pei-Yi Lin, Ethylene diamine as a novel liquid chemical reagent to probe the host guest interaction, 93 年度台灣質譜學會年會, 93/6/15-16.台灣大學.

- ●Wen-Feng Wu, Ya-Hsuen Lai, Hui-Fen Wu*, Differentiation of xylene isomers by SIMR, 93 年度台灣質譜學會年會, 93/6/15-16.台灣大學.
- ●C-H Yan, C-H Lin, H-F Wu*, A Liquid-Phase Microextraction Method with a Dual Gauge Microsyringe, 93 年度台灣質譜學會年會, 93/6/15-16.台灣大學.
- ●Bo-Min Liu, Chi-Hsien Lin, Hui-Fen Wu*, Solvent Microextraction and Gas Chromatography/Chemical Ionization Mass Spectrometry to differentiate Anisaldehyde Isomers in Urine and Blood, 93 年度台灣質譜學會年會, 93/6/15-16.台灣大學.
- ●Bo-Min Liu, Bin-Wei Lai, Ja-Yi Yen, Hui-Fen Wu, Liquid-Phase Microextraction and Gas Chromatography / Negative Chemical Mass Spectrometry for the investigation of Dichlorophenol, 93 年度台灣質譜學會年會, 93/6/15-16.台灣大學.
- ●Nadeem Ahmad Khan, Chi-Hsien Lin, Ya-Yi Yen, Li-Chi Lu, Hui-Fen Wu, Electrospray mass spectrometry to probe oxidation of 2,4,5-trichlorophenol via KMnO₄, 93 年度台灣質譜學會年會, 93/6/15-16.台灣大學.
- ●Wen Feng Wu, Li-Chi Lu, Hui- Fen Wu*, Probing the unusual product ions observed in Self-Ion/Molecule Reactions of xylene isomers, 93 年度台灣質譜學會年會, 93/6/15-16.台灣大學.
- ●Nadeem Ahmad Khan, Li-Chi Lu, Hui-Fen Wu, A novel method to probe the drug oxidation reactions in acidic medium by combining ESI/MS and UV/Vis, 93 年度台灣質譜學會年會, 93/6/15-16.台灣大學.
- ●Nadeem Khan, Li-Chi Lu, Chi-Hsien Lin, Bo-Min Liu, Hui-Fen Wu*, Study of metallic nano-particles to Clusters of water by using electrospray mass spectrometry, Taiwan International Conference on Nano Science and Technology, 台灣奈米國際研討會, 93/6/30-7/3,清華大學.
- ●Hui-Fen Wu*, 1 溶劑微萃取法及液相微萃取法結合氣相層析質譜的應用 2 自身離子/分子反應, June 11, 2004, Naitonal Chi-Nan 大學化學系演講.
- ●Chi-Hsien Lin, Chih-Hao Yang, Hui-Fen Wu*, A Novel Liquid-Phase Microextraction Method: a Dual Gauge Microsyringe with a Hollow Fiber Membrane, 第十屆分析化學技術交流研討會 2004/5/8, 中興大學.
- ●嚴哲毅,劉柏敏,吳慧芬*,利用固相微萃取法結合氣相層析質譜儀檢測市售藥物及血清中維他命E 之混合物,第十屆分析化學技術交流研討會. 2004/5/8,中興大學.
- ●Bo-Min Liu, Bin-Wei Lai, H-F Wu, Combination of Liquid-Phase Hollow Fibre Membrane Microextraction with Gas Chromatography/Negative Chemical Ionization Mass Spectrometry for the Determination of Dichlorophenol Isomers in Environmental Sample,第十屆分析化學技術交流研討會 2004/5/8,中興大學.
- ●Bo-Min Liu, Hui-Fen Wu*, Single-Drop Microextraction and Gas Chromatography-Mass Spectrometric Determination of Anisaldehyde Isomers in Human Urine and Blood Serum,第十届分析化學技術交流研討會 2004/5/8, 中興大學.
- ●L. C. Lu, H. F. Wu*, Drop to drop solvent microextraction, 第十屆分析化學技術交流研討會 2004/5/8, 中興大學.
- ●Wen-Feng Wu, Hui-Fen Wu*, The first observation of methyne addition ions for xylene isomers in Self-Ion/Molecule Reactions for small aromatic compounds, 第十屆分析化學技術交流研討會 2004/5/8, 中興大學.
- ●Hui-Fen Wu*, Chi-Hsien Lin, Bo-Min Liu, Li-Chi Lu, Ja-Yi Yen, Ya-Hsuen Lai, Probing the reactions of metallic nanoparticles with organic compounds by electrospray mass spectrometry,第三 屆海峽兩岸奈米科學與技術研討會 2004 / 4/27-5/1, P407, 東華大學.
- ●S J Dai, H F Wu,* F S Pan,藥物動力學:應用電灑法質譜儀結合液相層析儀快速偵測生物體血液及尿液,了解天然物之作用,開發新藥,2003年11月28-30,中國化學會年會,中原大學.
- ●劉柏敏,吳慧芬*利用溶劑微萃取法結合氣相層析儀/化學游離法/串聯質譜鑑別及定量茴香醛結構異構物之混合物,2003年11月28-30,中國化學會年會,中原大學.
- ●劉柏敏,賴秉葦,吳慧芬*,液相微萃取結合氣相層析儀/串聯質譜在負離子化學游離法模式下區分及定量水、尿液及血清中之氯酚同分異構物,2003年11月28-30,中國化學會年會,中原大學.
- ●Mon-Tin Wu, Chien-Hung Chen, Hui-Fen Wu*, Novel observation of Self Ion / Molecule Reaction during collisionally activated dissociation in an internal source ion trap mass spectrometer, 2003 年,

- 2003年11月28-30,中國化學會年會,中原大學.
- ●W. F. Wu, L. C. Lu, H. F. Wu*, Probing the Self-Ion/Molecule Reactions of xylene isomers by deuterium labeling and isolation experiments in an ion trap mass spectrometer, 2003 年 11 月 28-30, 中國化學會年會,中原大學.
- ●C. H. Yang, H. F. Wu*, Comparison of liquid phase microextraction, solvent microextraction and solid phase microextraction for determination of the organochlorine pesticides in water by Gas Chromatography/Ion Trap Mass Spectrometry, 2003 年 11 月 28-30, 中國化學會年會,中原大學.
- ●H. F. Wu*, J. H. Yen, C. C. Chin, Differentiation and quantitation of methoxyacetophenone isomers in one drop of water by combining drop to drop solvent microextraction, gas chromatograph, self ion/molecule reaction and tandem mass spectrometry, 2003 年 11 月 28-30,中國化學會年會,中原大學.
- •H. F. Wu*, Probing Self Ion/Molecule Reactions in Ion Trap Mass Spectrometer, Proceedings of 2003 International Chemical Conference, Taipei Analytical Chemistry, 10/29-11/1. Invited Talk, L33.
- ●Wen-Feng Wu, Hui-Fen Wu*, Comparing differentiation of xylene isomers by electronic ionization, chemical ionization and Self-Ion/Molecule Reactions and the first observation of methyne addition ions for xylene isomers in Self-Ion/Molecule Reactions for non-nitrogenated compounds, Proceedings of 2003 International Chemical Conference, Taipei Analytical Chemistry., 10/29-11/1, 59.
- ●Pei-Yi Lin, Hui-Fen Wu*, Probing the Effects of Reagent Gas Pressure and Ion Source Temperature for Dimethyl Ether Chemical Ionization of Tricyclic Antidepressants in an External Source Ion Trap Mass Spectrometer, Proceedings of 2003 International Chemical Conference, Taipei Analytical Chemistry., 10/29-11/1, 58.
- Yen-Ren Chen, Bin-Wei Lai, Hui-Fen Wu*, Study the effects of total ion chromatogram splitting in the Ion Trap Mass Spectrometer, International Chemical Conference, Taipei Analytical Chemistry., 2003, 10/29-11/1, p57.
- ●Hui-Fen Wu*, 溶劑微萃取法及固相微萃取法結合自身離子/分子反應於離子阱串聯質譜儀中的應用及正/負化學游離法的研究, Sep. 5, 2003,成功大學化學系演講.
- •Leo Brewer, Karen Krushwitz, Robert Lamoreaux, Hui-Fen Wu, Thermodynamics of Alloys, Rome, Italy, Sep. 8-13, 2002.
- ●C.H. Yang, H. F. Wu*,利用頂空式固相微萃取法/氣相層析離子阱串聯質譜儀偵測水中二甲苯及研發以自身離子/分子反應進行同分異構物鑑別之新方法,2002年10月25-27,中油,中國化學會年會,paper No.P-AN-047.
- ●Hui-Fen Wu*, Wen-Feng Wu, Probing the Reaction Mechanism for Methylene Addition Reaction of O, M, P-Xylenes in the Self–Ion/ Molecule Reactions and Differentiation of Xylene Isomers by Several Ion Trap Mass Spectrometric Techniques. 2002 年 10 月 25-27, 中油,中國化學會年會, paper No.P-AN-046.
- ●Hui-Fen Wu*, Shan-Min Huan, Chan-Fu Wu and Mon-Tin Wu, 2002, Molecular Modelling and Electrospray Mass Spectrometry for Probing Host-Guest Interaction of Metal Ions with Bis[(benzo-15-crown-5)-15-ylmethyl]pimelate. 2002 年 10 月 25-27, 中油,中國化學會年會, paper No.P-AN-044.
- ●Hui-Fen Wu*, Chien-Hung Chen and Bin-Wei Lai, Unusual Adduct Ions Attachment in Negative Chemical Ionization and Collisionally Activated Dissociation in an Ion Trap. 2002 年 10 月 25-27,中油,中國化學會年會, paper No.P-AN-045.
- ●Hui-Fen Wu*, Yu-Jie Chuan, A Novel Method for Isomer Differentiation by Combining Gas Chromatograph, Selective Self–Ion/ Molecule Reaction and Tandem Mass Technique in an Ion Trap Mass Spectrometer. 50th ASMS Conference on Mass Spectrometry and Allied Topics, Orlando, FL, ThPQ351. 2002 年 6 月 2-6
- ●Bin-Wei Lai, Hui-Fen Wu*, Self-Ion/ Molecule Reactions for Negative Ions in an External Source Ion Trap Tandem Mass Spectrometer, 2002 年 5/10,分析技術研討會,弘光技術學院, B8.
- ●Hui-Fen Wu*, Chien-Hung Chen, Probing the Reaction Mechanisms of Selective Self Ion / Molecule Reaction for dopamine in an Internal Source Ion Trap Mass Spectrometer, 2001 年 12 月 28-30,成功大學,中國化學會年會, paper No.P3-AN-037, page AN-38.

- ●Hui-Fen Wu*, Yu-Jie Chuan, A Novel Method for Isomer Differentiation in an Ion Trap Mass Spectrometer, 2001 年 12 月 28-30,成功大學,中國化學會年會, paper No.P3-AN-032, page AN-37.
- ●Hui-Fen Wu*, Mao-Jun Chun, Examination of Uracil Compounds by Electron Capture Detection and Collisional Activated Dissociation in the External Source Ion Trap, 2001 年 12 月 28-30,成功大學, 中國化學會年會, paper No.P3-AN-050, page AN-41.
- ●Hui-Fen Wu*, Chao-Chin Wu, "Probing the Reaction Patterns for Negative Chemical Ionization of Phthalic Anhydride and Related Compounds in an External Source Ion Trap Mass Spectrometer", 2001 年 12 月 28-30,成功大學,中國化學會年會, paper No.P3-AN-029, page AN-36.
- ●Hui-Fen Wu*, Shun-Min Huan and Chan-Fu Wu, Conformation Analysis and Binding Affinity Determination for Host-Guest Complexation of Alkali Metal Ion with Bis (Crown Ether)s by Electrospray Mass Spectrometry, 2001 年 12 月 28-30,成功大學,中國化學會年會, paper No.P3-AN-038, page AN-38.
- ●Hui-Fen Wu* and Pei-Yi Lin, "Investigating the Pressure and Temperature Effect for Dimethyl Ether Chemical Ionization of Tricyclic Antidepressants in an External Source Ion Trap Tandem Mass Spectrometer", 2001 年 12 月 28-30,成功大學,中國化學會年會, paper No.P2-AN-016, page AN-18.
- ●Hui-Fen Wu* and Pei-Yi Lin, "Study of the Effects of Temperature Parameters on the Positive Chemical Ionization Spectra in Ion Trap Mass Spectrometer", 2001 年 12 月 28-30,成功大學,中國化學會年會, paper No.P3-AN-026, page AN-35.
- ●Hui-Fen Wu*, Li-Wei Chen and Chien-Hung Chen, Probing the Reactive Sites for Ion/Molecule Reactions of Anthraquinones with Dimethyl Ether by an External Source Ion Trap Tandem Mass Spectrometer and Computational Chemistry, 2001 年 12 月 28-30,成功大學,中國化學會年會, paper No.P3-AN-035, page AN-37.
- ●Hui-Fen Wu*, Chien-Hung Chen, Yu-Jie Chuang, Hsiao-Wei Li and Wen-Fon Wu, 2001 年 10 月 20-21 日, "Study of Self Ion/Molecule Reactions in Bench-top Ion Trap Mass Spectrometer",第二 屆兩岸分析化學會議, 北京,清華大學, Invited Speaker, p215.
- ●Hui-Fen Wu*, Shiuan-Ming Huang, Chang-Fu Wu, 2001 年 7 月 22-26 日, "Synthesis of Host Guest Complexes by Electrospray Ionization Mass Spectrometry" 11th IUPAC Syposium on Organiometallic Chemistry Directed Towards Organic Synthesis, Taipei, Yuan-Sun Hotel, p216.
- ●Hui-Fen Wu*, Pei-Yi Lin, 2001 年 6 月 1-2 日, "Investigating the Effects of Some Basic Temperature Parameters on A Powerful Instrument for Environmental Research the Ion Trap Tandem Mass Spectrometer" 2001 年環境分析化學研討會,淡江大學, p41.
- ●Hui-Fen Wu*, Ming-Yi Ho and Chien-Hung Chen, 2001 年 5 月 27-31 日, "Selective Self Ion / Molecule Reactions in Ion Trap Mass Spectrometer", 49th ASMS Conference on Mass Spectrometry and Allied Topics, Chicago, IL, ThP 046.
- ●Hui-Fen Wu*, Chien-Hung Chen and Ming-Yi Ho, 2001 年 4 月 27 日, "Study of the Best Pressure Range for Ion/Molecule Reactions of Anthraquinones in an Ion Trap Mass Spectrometer with an External Source" 2001 年分析技術研討會, 正修技術學院, p28.
- ●吳慧芬*, 2001 年 1 月 6 日,"離子阱質譜儀的正/負化學游離法之溫度,壓力效應,串聯質譜靈敏度的測量與自身離子/分子反應的研發",淡江尖端化學系列研討會-質譜,淡江大學, Invited Talk, page 6-8.
- ●Hui-Fen Wu*, Ming-Yi Ho, Chien-Hong Chen, 2000 年 11 月 24-26 日, "Study of Pressure Effect for Dimethyl Ether Chemical Ionization in an External Source Ion Trap",中國化學會年會,台中, 靜宜大學, paper No.P-2A-AN-012, page AN-50.
- ●吳慧芬*, 2000 年 6 月 17-18 日, "Examination of Pressure and Temperature Effect of Electron Capture Detection Mass Spectrometry in an External Source Ion Trap", 第一屆兩岸分析化學暨第八屆分析化學技術交流研討會,新竹, 清華大學, paper No.P-43, page 182.
- ●吳慧芬*,林雅萍, 2000 年 6 月 17-18 日, "Examination of the Collisional Cooling Effect for Two and Three Kinds of Mixed Buffer Gases in an Internal Source Ion Trap", 第一屆兩岸分析化學暨第八 屆分析化學技術交流研討會,新竹,清華大學, paper No.P-27, page 166.
- ●吳慧芬*,林雅萍,林佩怡,陳建弘, 1999 年 11 月 19-20 日, "冠狀醚與二甲基醚離子反應的研究",中國化學會年會,台北國際會議中心, paper No.P-AN-003, page 37.

- ●吳慧芬*,林雅萍, 1999 年 11 月 19-20 日, "以離子阱串聯質譜儀之正/負化學游離法進行嘌呤類化合物的分析",中國化學會年會,台北國際會議中心, paper No.P-AN-004, page 37.
- •Hui-Fen Wu*, Chao-Ching Wu, 1999, "Study of Temperarure and Pressure Effect of Phthalic Anhydride by Negative Ion Analysis Using Methane and Oxygen as Reagent Gases in an Ion Trap Tandem Mass Spectrometer". Eighth Asian Chemical Congress, Taipei, Nov.21-24, paper No. O-A-14, page 134.
- ●Hui-Fen Wu* and Ya-Ping Lin, 1999, "Determination of Sensitivity of the External Source Ion Trap Tandem Mass Spectrometer Using Dimethyl Ether Chemical Ionization". Eighth Asian Chemical Congress (8ACC), Taipei, Nov.21-24, paper No. P-A-54, page 201.
- ●Hui-Fen Wu* and Miao-Chun Chung, 1999, "Characterization of Uracil Compounds and their derivatives by Negative Ion Analysis in an Ion Trap Tandem Mass Spectrometer" 第7屆分析化學技術交流研討會,台中,靜宜大學, May 16-17, page 28.
- ●Hui-Fen Wu* and Chao-Ching Wu, 1999, "Characterization of Phthalic Anhydride and their Derivatives by Electron Capture Detection/Collisional Activated Dissociation in Ion Trap Mass Spectrometer with an External Ionization Source" 第7屆分析化學技術交流研討會,台中,靜宜大學, May 16-17, page 33.
- •Hui-Fen Wu* and Li-Wei Chen, "Combined Ion/Molecule Reactions and Tandem Mass Spectrometric Techniques for the Characterization of Anthraquinones in an External Ionization Ion Trap Mass Spectrometer". Proceedings of 1999 International Chemical Conference, Taipei Analytical Chemistry. May 12-15, page 3.
- •Hui-Fen Wu* and Ya-Ping Lin, 1999, "Study of Reaction Mechanisms for Ion-Molecule Reactions and Collisionally Activated Dissociation of Dopamine and Adrenaline by an Ion Trap Mass Spectrometer with an External Ionization Source" Proceedings of 1999 International Chemical Conference, Taipei Analytical Chemistry. May 12-15, page 5.
- •Hui-Fen Wu*, Li-Wei Chen and Ya-Ping Lin, 1999, "Simulation of Collisional Cooling Effect in a Quadrupole Ion Trap Mass Spectrometer". Proceedings of 1999 International Chemical Conference, Taipei Analytical Chemistry. May 12-15, page 4.
- ●吳慧芬*,林雅萍, 1998,年 11 月 27-29, "Dopamine 及 Nortriptyline 與二甲基醚離子的氣相離子/分子反應的溫度效應之研究",中正大學,中國化學會年會, paper No.P-1b-AN-084, page 90.
- ●吳慧芬*,吳朝欽, 1998,年 11 月 27-29, "黃素母酮類藥物在離子阱質譜儀中之離子/分子反應",中正大學,中國化學會年會, paper No.P-1b-AN-085, page 91.
- ●吳慧芬*,鍾淼鈞, 1998,年 11 月 27-29, "三環系抗鬱劑藥物與二甲基醚離子之離子/分子反應", 中正大學,中國化學會年會, paper No.P-1b-AN-083, page 90.
- ●吳慧芬*,陳立偉,1998, 五月二日,"模擬離子阱質譜儀混合之緩衝氣體的碰撞冷卻效應". 第六屆分析化學技術交流研討會, 屏東大仁藥專, page E14.
- ●吳慧芬*, 陳立偉,1998, 五月二日, "恩昆類藥物與二甲基醚離子的氣相離子-分子反應". 第六屆分析化學技術交流研討會, 屏東大仁藥專, page E4.
- ●吳慧芬*, 林雅萍, 1998, 五月二日, "兒茶酚胺類藥物與二甲基醚離子之氣相離子-分子反應". 第六屆分析化學技術交流研討會, 屏東大仁藥專, page E5.
- ●Hui-Fen Wu*, Li-Wei Chen, 1997, Dec. 5-7, "Host-Guest Complexation of Alkaline Earth Metal Ions, Aluminum Ions and Transition Metal Ions with Crown Ethers by Fast Atom Bombardment Mass Spectrometry", 中國化學會年會,新竹, paper No.P-2-AN-035, page 179.
- ●吳慧芬*,陳立偉,鍾淼鈞,吳朝欽,林雅萍, 1997, Dec. 5-7, "理論計算模擬離子阱質譜儀中的碰撞冷卻效應",中國化學會年會,新竹,paper No.P-2-AN-145, page 234.
- ●Hui-Fen Wu*, Leo Brewer ,1997, Dec. 5-7, "Parameters for Calculation of Properties of Acid-Base Intermetallies in Brewer-Engel Theory", 中國化學會年會, 新竹, paper No. P-1-IN-014, page 80.
- ●Hui-Fen Wu*, 1997, May, "Gas-Phase Ion/Molecule Reactions in a Quadrupole Ion Trap Mass Spectrometry". 交通大學,第五屆分析化學技術交流研討會,May 3,p I-3. Invited Speaker.
- ●Hui-Fen Wu*, Leo Brewer, "Calculation of Thermodynamic Effect of the Brewer-Engel Generalized Acid-Base Reactions of the 1:1 Intermetallics for Nontransition Metals Al, Mg with Transition Metals":中國化學會年會,鳳山陸軍官校, 1996, Dec. 6-7, paper No.P-1-PH-15,page 223.
- •Karen Krushwitz, Leo Brewer, Hui-Fen Wu, "New Materials for Emerging Giant: Brewer-Engel

Model for China in the 21st Century". Gordon Conference: High-Temperature Chemistry, Tilton, New Hampshire, 1996, July 21-26.