Curriculum Vitae

Prof. Wen-Ping Peng (彭文平)

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EDUCATION

09/2001-11/2004	Ph. D. in Physics, National Taiwan University, Taipei, Taiwan (advisor: Prof. Yuan-Tseh Lee, Co-advisor: Dr. Huan-Cheng Chang)
09/1997-06/1999	M. S. in Physics, National Central University, Chung-Li, Taiwan
09/1994-06/1997	B. S. in Physics, National Central University, Chung-Li, Taiwan

PROFESSIONAL EXPERIENCE

02/2017-02/2018	Quality Assurance Supervisor, Eastern Taiwan Center for Pesticide and Toxic Substance Analysis, National Dong Hwa University
07/2016-12/2016	Visiting scholar, Department of Chemistry, Purdue University, USA
02/2015-present	Professor, Department of Physics, National Dong Hwa University
08/2011-01/2015	Associate Professor, Department of Physics, National Dong Hwa University
07/2011-11/2011	Visiting scholar, Department of Chemistry, Purdue University, USA
06/2011-07/2011	Visiting scholar, Pacific Northwest National Laboratory (PNNL), USA
04/2011-present	Consultant to AcroMass Technologies, Inc.
08/2008-07/2011	Joint Appointment Assistant Research Fellow, The Genomics Research Center, Academia Sinica, Taipei, Taiwan
08/2007-7/2011	Assistant Professor, Department of Physics, National Dong Hwa University
06/2006-09/2007	Postdoctoral Fellow, Department of Chemistry, Purdue University, USA (Prof. R. Graham Cooks)
10/2006, 05/2007	Cooperating ion soft landing project with Dr. Julia Laskin at Pacific Northwest National Laboratory (PNNL), USA

05/2005-06/2006	Postdoctoral Fellow, The Genomics Research Center, Academia Sinica, Taipei, Taiwan (Dr. Chung-Hsuan Chen's Lab)
11/2004-04/2005	Postdoctoral Fellow, Institute of Atomic and Molecular Sciences , Academia Sinica, Taipei, Taiwan (Dr. Huan-Cheng Chang's Lab)
09/2000-10/2000	Learning the knowledge of quadrupole ion trap theory and experiment with Prof. Dieter Gerlich at Technische Universität, Chemnitz, Germany (The DAAD/NSC project)
07/1999-10/2004	Research Assistant (Dr. Huan-Cheng Chang's Lab) Institute of Atomic and Molecular Sciences, Academia Sinica, Taipei, Taiwan

HONORS

1. Young scholar award of Taiwan Society for Mass Spectrometry 2013.
2. The paper, "Quantitaive measurement of nano-/microparticle endocytosis by cell mass spectrometry" was selected to be highlighted in the frontispiece at the beginning of the communication section by Angewandte Chemie International Edition (2010).
3. International Journal of Mass Spectrometry Best Student Paper Award-Instrumentation (2004).
4. The paper, "Laser-induced acoustic desorption mass spectrometry of single bioparticles", was recognized as a very important paper (VIP) by Angewandte Chemie International Edition (11-24-2005).
5. Institute of Atomic and Molecular Sciences annual award for outstanding publication by a junior researcher (2005).
6. The achievements of International Journal of Mass Spectrometry Best Student Paper Award (2004) and mass measurement of single bacteria particles were reported by Liberty Times in Taiwan.
7. The paper published in the Journal of the American Chemical Society 126 (2004): 11766-11767 was recognized as very important paper of Academia Sinica in the year of 2005.
8. The paper, "Optical detection methods for mass spectrometry of macroions", was elected as a top 5% paper of IAMS, Academia Sinica during the year of 2003 to 2005.

PUBLICATIONS

1. Avinash A. Patil, Mhikee Janella N. Descanzo, Justin Benedict A. Agcaoili, Cheng-Kang Chiang, Chia-Liang Cheng, Huan-Cheng Chang, Wen-Ping Peng*, Carboxylated/Oxidized Diamond Nanoparticles for Quantifying Immunoglobulin G Antibodies Using Mass SpectrometryPeng, ACS Applied Nano Materials, https://doi.org/10.1021/acsanm.1c01553 (2021)
2. Avinash A. Patil, Thị Khanh Ly Lại, Chi-Wei Wang, Guan-Fu Chen, Bo-Xun Du, Cheng-Kang Chiang, Wen-Ping Peng*, Generation of multiply charged ions from homogeneous MALDI microcrystals, International Journal of Mass Spectrometry,

462, 116539 (2021)

3. Avinash A. Patil, Chen-Wei Lee, Szu-Wei Chou, Chun-Yen Cheng, Wen-Ping Peng*, Linear and Nonlinear Resonance Ejection of High Mass Ions with charge detection rectilinear ion trap mass spectrometer, International Journal of Mass Spectrometry 450, 116301 (2020)

4. Shao-Yu Liang, Avinash A. Patil, Chou-Hsun Han, Szu-Wei Chou, Wen Chang, Po-Chi Soo, Huan-Cheng Chang, Wen-Ping Peng*, Ionization of Submicrometer-Sized Particles by Laser-Induced Radiofrequency Plasma for Mass Spectrometric Analysis, Analytical Chemistry 90, 13236−13242 (2018)

5. Avinash A. Patil, Cheng-Kang Chiang, Chen-Hao Wen, Wen-Ping Peng*, Forced dried droplet method for MALDI sample preparation, Analytica Chimica Acta, 1031, 128-133 (2018)

6. Kai-Chih Chang, Chin-Yi Chung, Chen-Hsing Yeh, Kuo-Hsiu Hsu, Ya-Ching Chin, Sin-Siang Huang, Bo-Rong Liu, Hsi-An Chen, Anren Hu, Po-Chi Soo, Wen-Ping Peng*, Direct detection of carbapenemase-associated proteins of *Acinetobacter baumannii* using nanodiamonds coupled with matrix-assisted laser desorption/ionization time-of-flight mass spectrometry, Journal of Microbiological Methods, 147, 36-42 (2018)

7. Avinash A. Patil, Szu-Wei Chou, Pei-Yu Chang, Chen-Wei Lee, Chun-Yen Cheng, Ming-Lee Chu, Wen-Ping Peng*, High Mass Ion Detection with Charge Detector Coupled to Rectilinear Ion Trap Mass Spectrometer, Journal of The American Society for Mass Spectrometry 28, 1066-1078 (2017)

8. Dalton T. Snyder, Wen-Ping Peng, R. Graham Cooks, Resonance Methods in Quadrupole Ion Traps, Chemical Physics Letters 668, 69-89 (2017) (Cover picture)

9. Caiqiao Xiong, Xiaoyu Zhou, Qing He, Xi Huang, Jiyun Wang, Wen-Ping Peng, Huan-Cheng Chang, and Zongxiu Nie, The development of visible-wavelength MALDI cell mass spectrometry (CMS) for high-efficiency single-cell analysis. Analytical Chemistry 88, 11913-11918 (2016)

10. Avinash A. Patil; Sin-Ciang Jiang; Kai-Chun Yen; Szu-Wei Chou; Chun-Yen Cheng; Wen-Ping Peng*, "Ion Velocities of Laser Desorbed Ions Passing through Quadrupole Electric Fields", International Journal of Mass Spectrometry, 401, 46-54 (2016)

11. Po-Chi Soo, Yu-Tze Horng, Ai-Ti Chen, Shih-Chieh Yang, Kai-Chih Chang, Jen-Jyh Lee, Wen-Ping Peng*, "Validation of nanodiamond-extracted CFP-10 antigen as a biomarker in clinical isolates of Mycobacterium tuberculosis complex in broth culture media", Tuberculosis, 95, 620-624 (2015)

12. Wen Ping Peng*, Szu-Wei Chou, Avinash Patil, "Measuring Masses of Large

Biomolecules and Bioparticles Using Mass Spectrometric Techniques ", Analyst, 139, 3507-3523 (2014)

13. Caiqiao Xiong, Xiaoyu Zhou, Ning Zhang, Lingpeng Zhan, Suming Chen, Jiyun Wang, Wen-Ping Peng, Huan-Cheng Chang, Zongxiu Nie, "Quantitative Assessment of Protein Adsorption on Microparticles with Particle Mass Spectrometry", Analytical Chemistry, 86, 3876−3881 (2014)

14. Yao-Hsin Tseng, Charlotte Uetrecht, Shih-Chieh Yang, Arjan Barendregt, Albert J. R. Heck, and Wen-Ping Peng*, "Game-Theory-Based Search Engine to Automate the Mass Assignment in Complex Native Electrospray Mass Spectra", Analytical Chemistry, 85, 11275−11283 (2013)

15. Caiqiao Xiong, Xiaoyu Zhou, Jianing Wang,Ning Zhang, Wen-Ping Peng, Huan-Cheng Chang, Zongxiu Nie*, "Ambient Aerodynamic Desorption/Ionization Method for Microparticle Mass Measurement", Analytical Chemistry, *85*, 4370–4375 (2013)

16. Po-Chi Soo, Ching-Jen Kung, Yu-Tze Horng, Kai-Chih Chang, Jen-Jyh Lee, and Wen-Ping Peng*, "Detonation Nanodiamonds for Rapid Detection of Clinical Isolates of Mycobacterium tuberculosis Complex in Broth Culture Media", Analytical Chemistry, 84, 7972−7978 (2012)

17. Szu-Wei Chou, Guo-Rung Shiu, Huan-Cheng Chang, Wen-Ping Peng*, "Wavelet-Based Method for Time-Domain Noise Analysis and Reduction in a Frequency-Scan Ion Trap Mass Spectrometer", Journal of the American Society for Mass Spectrometry, 23,1855-1864 (2012)

18. Zane Baird, Wen-Ping Peng*, R. Graham Cooks*, "Ion transport and focal properties of an ellipsoidal electrode operated at atmospheric pressure", International Journal of Mass Spectrometry,, 330-332, 277-284 (2012)

19. C. Xiong, G. Xu, X. Zhou, J. Wang, Y. Tang, R. Chen, W.-P. Peng, H.-C. Chang, Z. Nie, "The Development of Charge Detection-Quadrupole Ion Trap Mass Spectrometry Driven by Rectangular and Triangular Waves", Analyst, 137, 1199-1204 (2012)

20. Y.-H. Tseng, C. Uetrecht, A. J. R. Heck, W.-P. Peng*, "Interpreting the Charge State Assignment in Electrospray Mass Spectra of Bioparticles", Analytical Chemistry, 83, 1960-1968 (2011)

21. Caiqiao Xiong, Xiaoyu Zhou, Rui Chen, Yiming Zhang, Wen-Ping Peng, Zongxiu Nie, Huan-Cheng Chang, Huwei Liu, and Yi Chen, "Characterization of Column Packing Materials in High-Performance Liquid Chromatography by Charge-Detection Quadrupole Ion Trap Mass Spectrometry", Analytical Chemistry, 83, 5400-5406 (2011)

22. Wen-Ping Peng, Grant E. Johnson, Ivy C. Fortmeyer, Peng Wang, Omar Hadjar, R. Graham Cooks, Julia Laskin, "Redox Chemistry in Thin Films of Organometallic Complexes Prepared Using Ion Soft Landing", Physical Chemistry Chemical Physics,

13, 267-275 (2011)

23. Z. Zhu, C. Xiong, G. Xu, H. Liu, X. Zhou, R. Chen, W.-P. Peng*, Z. Nie*, "Characterization of Bioparticles Using a Miniature Cylindrical Ion Trap Mass Spectrometer Operated at Rough Vacuum", Analyst, 136, 1305-1309 (2011)

24. X. Zhou, C. Xiong, G. Xu, H. Liu,Y. Tang, Z. Zhu, R. Chen, H. Qiao, Y.-H. Tseng, W.-P. Peng, Z. Nie, Y. Chen, "Potential Distribution and Transmission Characteristics in a Curved Quadrupole Ion Guide", Journal of the American Society for Mass Spectrometry, 22, 386-398 (2011)

25. H.-C. Lin, H.-H. Lin, C.-Y. Kao, Alice L. Yu, W.-P. Peng*, C.-H. Chen*, "Quantitative Measurement of Nano-/Microparticle Endocytosis by Cell Mass Spectrometry", Angewandte Chemie International Edition 49, 3460-3464 (2010) (Cover picture)

26. Xiaoyu Zhou, Zhiqiang Zhu, Caiqiao Xiong, Rui Chen, Wenjun Xu, Haoxue Qiao, Wen-Ping Peng, Zongxiu Nie, and Yi Chen, "Characteristics of Stability Boundary and Frequency in Nonlinear Ion Trap Mass Spectrometer", Journal of the American Society for Mass Spectrometry, 21, 1588–1595 (2010)

27. W.-P. Peng*, Alice L. Yu, and C.-H. Chen, "Quantification Study of Drug Delivery by Nanocarriers", G.I.T. Laboratory Journal, 14, 32-33 (2010)

28. W.-P. Peng, H.-C. Lin, M. L. Chu, H.-C. Chang, H.-H., Lin, A. L. Yu, and C.-H. Chen, "Charge Monitoring Cell Mass Spectrometry", Analytical Chemistry, 80, 2524-2530 (2008)

29. W.-P. Peng, M. Goodwin, Z. Nie, M. Volný, O. Zheng, R. G. Cooks, "Ion Soft Landing using Novel Rectilinear Ion Trap Mass Spectrometer", Analytical Chemistry, 80, 6640-6649 (2008)

30. W.-P. Peng, M. Goodwin, H. Chen, R. G. Cooks, and J. Wilker "Thermal Formation of Mixed-Metal Inorganic Clusters at Atmospheric Pressure", Rapid Communications in Mass Spectrometry, 22, 3540-3548 (2008)

31. W.-P. Peng, H.-C. Lin, H.-H., Lin, M. L. Chu, A. L. Yu, H.-C. Chang, and C.-H. Chen, "Charge-Monitoring Laser-induced Acoustic Desorption Mass Spectrometry for Cell and Microparticle Mass Distribution Measurement ", Angewandte Chemie-International Edition, 46, 3865-3869 (2007)

32. W.-C. Chang, L.-C. L. Huang, Y.-S. Wang, W.-P. Peng, H.-C. Chang, N-Y. Hsu, W.-B. Yang, and C.-H. Chen, "Matrix-assisted laser desorption/ionization (MALDI) mechanism revisited", Analytica Chimica Acta 582, 1-9 (2007)

33. W.-P. Peng, Y.-C. Yang, M.-W Kang, Y.-K Tzeng, Z. Nie, H.-C. Chang, W. Chang, and C.-H Chen, "Laser-induced acoustic desorption mass spectrometry of single

bioparticles ", Angewandte Chemie-International Edition 118, 1423-1426 (2006) (VIP)

34. ZX Nie, C.-W. Lin, W.-P Peng, Y. T. Lee, H.-C. Chang, "Frequency scan of a quadrupole mass analyzer in the third stability region for protein analysis", Journal of the Chinese Chemical Society 53, 47-52 (2006)

35. W.-P. Peng, Y.-C. Yang, C.-W, Lin, and H.-C. Chang, "Molar mass and molar mass distribution of polystyrene size standards", Analytical Chemistry, 77, 7084-7089 (2005) (Technical Note)

36. W.-P. Peng, Y. T. Lee, J. W. Ting, and H.-C. Chang, "Averaging peak-to-peak voltage detector for absolute mass determination of single particles with quadrupole ion traps", Review of Scientific Instruments, 76, 023108 (2005)

37. W.-P. Peng, Y. Cai, and H.-C. Chang, "Optical detection methods for mass spectrometry of macroions", Mass Spectrometry Reviews, 23, 443-465 (2004)

38. W.-P. Peng, I.-C. Yang, M.-W. Kang, Y. T. Lee, and H.-C. Chang, "Measuring masses of single bacterial whole cells with a quadrupole ion trap", Journal of the American Chemical Society, 126, 11766-11767 (2004)

39. W.-P. Peng, Y. Cai, Y. T. Lee, and H.-C. Chang, "Laser-induced fluorescence/ion trap as a detector for mass spectrometric analysis of nanoparticles", International journal of mass spectrometry, 229, 67-76 (2003)

40. Y. Cai, W.-P. Peng, H. C. Chang, "Ion trap mass spectrometry of fluorescently labeled nanoparticles", Analytical Chemistry, 75, 1805-1811 (2003)

41. Y. Cai, W.-P. Peng, S. J. Kuo, C. C. Han, S. Sabu, and H. C. Chang, "Optical detection and charge-state analysis of MALDI-generated particles with molecular masses larger than 5MDa", Analytical Chemistry, 74, 4434-4440 (2002)

42. Y. Cai, W.-P. Peng, S. J. Kuo, and H. C. Chang, "Calibration of an audio-frequency ion trap mass spectrometer," International journal of mass spectrometry, 214, 63-73 (2002)

43. Y. Cai, W.-P. Peng, S.-J. Kuo, and H.-C. Chang, "Single-particle mass spectrometry of polystyrene microspheres and diamond nanocrystals," Analytical Chemistry, 74, 232-238 (2002)

44. S. K. Lai, W.-P. Peng, and G. F. Wang, " Realistic calculation of the low- and high-density liquid phase separation in a charged colloidal dispersion," Physical Review E, Volume 63, 041511 (2001)

45. S. K. Lai, G. F. Wang, W.-P. Peng, J. L. Wang, " Rescaled mean spherical approximation for concentrated charge-stabilized colloids," Physica B 269, 183-188 (1999)

PATENT PUBLICATIONS

1. "Ion Trap Mass Spectrometer", H.-C. Chang, W.-P. Peng, Y. Cai, S.-J. Kuo, U. S. Patent, 6,777,673B2, August 17, 2004
2. "Nanoparticle ion detector", H.-C. Chang, W.-P. Peng, Y. Cai, U. S. Patent, 7,119,331B2, October 10, 2006
3. "音頻離子阱單粒子質譜儀", 張煥正, 彭文平, 蔡永, 郭善仁, I250278, 2006/03/01
4. "探測奈米粒子之方法及其裝置", 張煥正, 彭文平, 蔡永, I257705, 2006/07/01
5. "System and Method For Performing Charge-Monitoring Mass Spectrometry", C.-H. Chen, W.-P. Peng, M.L. Chu, H. C. Chang, H. C. Lin, US20090189069 A1, 2009/7/30
6. "System and method for performing charge-monitoring mass spectrometry", Huan Cheng Chang, Chung Hsuan Chen, Ming Lee Chu, Huan-Chang Lin, Wen-Ping Peng, WO2009076535 A1, 2009/6/18
7. "Methods and apparatuses for preparing a surface to have catalytic activity", R. G. Cooks, Wen-Ping Peng, Zheng Ouyang, Michael P. Goodwin, US20090011953 A1, 2009/1/8
8. "以細胞質譜分析定量細胞所攝入之奈米/微米粒子", 陳仲瑄, 陳鈴津, 彭文平, 林煥彰, 林信宏, 高采玉, 201144804, 2011/12/16
9. "分子、粒子和細胞檢測裝置及其檢測方法", 陳仲瑄, 彭文平, 朱明禮, 張煥正, 林煥彰, I353447, 2011/12/01
10. "Quantitative measurement of nano/micro particle endocytosis with cell mass spectrometry", Huan-Chang Lin, Hsin-Hung Lin, Cai-Yu Kao, Alice L. Yu, Wen-Ping Peng, Chung-Hsuan Chen, US20110236882 A1, 2011/9/29
11. "Quantitative measurement of nano / micro particle endocytosis with cell mass spectrometry", Huan-Chang Lin, Hsin-Hung Lin, Cai-Yu Kao, Alice L. Yu, Wen-Ping Peng, Chung-Hsuan Chen, WO2011123479 A1, 2011/10/6

BOOKS

1. 質譜分析技術原理與應用，台灣質譜學會編著，104 年 10 月 26 日出版。

CHINESE JOURNALS

1. 食品密碼的檢定科學，彭文平與何彥鵬，科技大觀園 (Sci-Tec Vista), 08/25/2014。

2. 食品安全的捍衛者：質譜儀器偵測原理與方法的簡介，彭文平與何彥鵬，科技大觀園 (Sci-Tec Vista), 08/25/2014
3. 彭文平、楊易昌、康名慰、高顥瑋、李遠哲、張煥正, "單細菌粒子質譜儀的介紹", 科儀新知, 142 期, 58-64, 十月 (2004)

PRESENTATIONS, POSTERS, AND INVITED LECTURES

1. Multiply Charged Ion Generation from Homogeneous MALDI Microcrystals, Avinash A. Patil, Cheng-Kang Chiang, Thị Khánh Ly Lại, Chi-Wei Wang, Guan-Fu Chen, Bo-Xun Du, Wen-Ping Peng, 17th Annual Conference of the Taiwan Society for Mass Spectrometry, National Chiayi University, September 1-3, 2020 (Invited talk)
2. Ionization of micrometer/submicrometer-sized particles by laser-induced radiofrequency plasma ion source, Wen-Ping Peng, 8th Asia-Oceania Mass spectrometry conference (AOMSC), University of Macau, Jan. 5-7, 2020 (Invited talk, 8D-2)
3. Measurement of polyhydroxyalkanoate production from single Escherichia cells with charge detection quadrupole ion trap mass spectrometer, Shao-Yu Liang, Avinash A. Patil, Chou-Hsun Han, Szu-Wei Chou, Wen Chang, Po-Chi Soo, Huan-Cheng Chang, Wen-Ping Peng, 8th Asia-Oceania Mass spectrometry conference (AOMSC), University of Macau, Jan. 5-7, 2020 (Poster)

4. Nanodiamond assisted MALDI-MS analysis of high mass proteins in nanomolar concentration range, Mhikee Janella N. Descanzo, Avinash A. Patil, Justin Benedict Agcaoili, Leevin Bacud, Chen-HaoWen, Wen-Ping Peng, 8th Asia-Oceania Mass spectrometry conference (AOMSC), University of Macau, Jan. 5-7, 2020 (Poster)

5. Quantifying nanomolar immunoglobulin G concentrations using aggregated nanodiamond particles and mass spectrometric analysis, Mhikee Janella N. Descanzo, Avinash A. Patil, Justin Benedict A. Agcaoili, Leevin S. Bacud, Wen-Ping Peng, Annual Meeting of the Physical Society of Republic of China, National Pingtung University, Feb. 2-5, 2020 (Oral, O1-BS)

6. Quantitative measurement of biopolymer polyhydroxyalkanoate (PHA) produced by recombinant Escherichia coli with charge detection quadrupole ion trap-mass spectrometer, Wen-Ping Peng, The 10th Cross-Strait Conference on Statistical Physics, Aug. 12-16, 2019 (Invited talk)

7. Quantitative measurement of biopolymer polyhydroxyalkanoate (PHA) produced by Escherichia coli with charge detection quadrupole ion trap-mass spectrometer, Shao-Yu Liang, Po-Chi Soo, Wen-Ping Peng, 16th Annual Conference of the Taiwan Society for Mass Spectrometry, National Chung Hsing University, July 3-5, 2019 (Invited talk)

8. Nanodiamond assisted MALDI-MS analysis of high mass proteins in nanomolar concentration range, Mhikee Janella N. Descanzo, Avinash A. Patil, Justin Benedict

Agcaoili, Leevin Bacud, Chen-HaoWen, Wen-Ping Peng, 16th Annual Conference of the Taiwan Society for Mass Spectrometry, National Chung Hsing University, July 3-5, 2019 (Poster)

9. Dipolar resonance ejection of high mass ions with charge detection rectilinear ion trap, Avinash A. Patil, Chen-Wei Lee, Szu-Wei Chou, Chun-Yen Cheng and Wen-Ping Peng, 16th Taiwan Society for mass spectrometry annual conference, National Chung Hsing University, Taiwan, July 3-5, 2019.

10. Ionizing Submicrometer-Sized Particles, Wen-Ping Peng, Conference of Genomic Research Center Academia Sinica with Eastern Universities, National Dong Hwa University, April 29-May 1, 2019 (Invited talk)

11. Ionization of submicrometer-sized particles by laser-induced radiofrequency plasma for mass spectrometer analysis, Shao-Yu Liang, Avinash A. Patil, Szu-Wei Chou, Chou-Hsun Han, Wen Chang, Po-Chi Soo, Huan-Cheng Chang, Wen-Ping Peng, Annual Meeting of the Physical Society of Republic of China, National Chiao Tung University, Jan. 23-25, 2019 (Oral, O7-BS-003)

12. Mass Measurement of Intact Bacterial and Viral Macroions, Shao-Yu Liang, Avinash A. Patil1, Chou-Hsun, Han, Szu-Wei Chou, Wen Chang, Po-Chi Soo, Huan-Cheng Chang, Wen-Ping Peng, 15th Taiwan Society for Mass Spectrometry Annual Conference and 7th World Chinese Mass Spectrometry, Academia Sinica, July 18-20, 2018 (Invited talk)

13. Forced Dried Droplet Method for MALDI Sample Preparation, Avinash A. Patil, Chen-Hao Wen, Cheng-Kang Chiang, Wen-Ping Peng, 15th Taiwan Society for Mass Spectrometry Annual Conference and 7th World Chinese Mass Spectrometry, Academia Sinica, July 18-20, 2018 (Poster)

14. "Forced dried droplet method for MALDI sample preparation", Avinash A. Patil, Cheng-Kang Chiang, Chen-Hao Wen, Wen-Ping Peng, Annual Meeting of Chinese Chemical Society, National Sun Yat-sen University, Dec. 8-9, 2018 (Invited talk)

15. "Identification of *Mycobacterium tuberculosis* and *Acinetobacter baumannii* using nanodiamond extracted biomarkers", Wen-Ping Peng, Mass Spectrometry for Clinical Diagnosis, National Sun Yat-sen University, Oct. 25-27, 2018 (Invited talk)

16. "Measuring Masses of Intact Bacterial Macroions", Shao-Yu Liang, Avinash A. Patil, Chou-Hsun Han, Szu-Wei Chou, Wen Chang, Po-Chi Soo, Huan-Cheng Chang, Wen-Ping Peng, 66th ASMS Conference on Mass Spectrometry and Allied Topics, San Diego CA, USA, June 3 – 7, 2018 (Poster, WP 303)

17. "Identification of Microorganisms with Mass Spectrometric Tools", Wen-Ping Peng, 3rd Vietnam Conference on Medical Physics, Ho Chi Minh city, Vietnam, Aug. 3-4, 2018

18. "Direct Detection of Carbapenemase-associated Proteins of *Acinetobacter Baumannii* Using Nanodiamonds and Mass Spectrometry", Kai-Chih Chang, Chin-Yi Chung, Chen-Hsing Yeh, Kuo-Hsiu Hsu, Ya-Ching Chin, Sin-Siang Huang, Bo-Rong Liu, Hsi-An Chen, Anren Hu, Po-Chi Soo, Wen-Ping Peng, Annual Meeting of the Physical Society of Republic of China 2018 (Oral, O6-BS-003)

19. "Detection of Microorganisms by Mass Spectrometry Tools", Wen-Ping Peng, International Conference on Nanotechnology Addressing the Convergence of Materials Science, Biotechnology and Medical Science, Kolhapur, India, November 9-11, 2017 (Oral, IT13)

20. "Identification of Antibodies using charge detection rectilinear ion trap mass spectrometer (CD-RIT MS) ", Avinash A. Patil, Chen-Wei Lee, Szu-Wei Chou, Wen-Ping Peng, International Conference on Nanotechnology Addressing the Convergence of Materials Science, Biotechnology and Medical Science, Kolhapur, India, 9 Nov 2017, (Oral, O-20)

21. "Guiding Ions with a Quadrupole Operated at Elevated Pressure", Wen-Ping Peng, Zhuoer Xie, Adam Hollerbach, Dalton T Snyder, R. Graham Cooks, 65th ASMS Conference on Mass Spectrometry and Allied Topics, June 4 - 8, Indianapolis, Indiana, USA, 2017 (poster WP337)

22. "Fast Detection of Carbapenemase-Producing Acinetobacter baumannii using Nanodiamonds and MALDI-TOF MS", Kai-Chih Chang, Chin-Yi Chung, Chen-Hsing Yeh, Kuo-Hsiu Hsu, Hsi-An Chen, Ya-Chin Chin, Anren Hu, Po-Chi Soo, Wen-Ping Peng, 65th ASMS Conference on Mass Spectrometry and Allied Topics, June 4 - 8, Indianapolis, Indiana, USA, 2017 (poster WP493)

23. Detection of High Mass MADLI Ions with a Charge Detection Rectilinear Ion Trap Mass Spectrometer (CD-RITMS) by Dipolar Resonant Excitation, Avinash Adhikrao Patil, Chen-Wei Lee, Szu-Wei Chou, Wen-Ping Peng, 65th ASMS Conference on Mass Spectrometry and Allied Topics, June 4 - 8, Indianapolis, Indiana, USA, 2017 (poster ThP353)

24. "Enhanced Performance of Charge Detection Rectilinear Ion Trap Mass Spectrometer (Cd-Rit Ms) with Dipolar Resonant Excitation", Avinash A. Patil, Chen-Wei Lee, Ming-An Wu, Szu-Wei Chou, Wen-Ping Peng, Annual Meeting of the Physical Society of Republic of China 2017 (Oral, O5-AM-002)

25. "Mass Measurement of Intact Bacterial and Viral Macroions", Wen-Ping Peng, Annual Meeting of the Physical Society of Republic of China 2017 (Oral, O7-BS-003)

26. "Measuring Masses of Single Bacterial Whole Cells with Laser Induced Acoustic Desorption Plasma Charge Detection Quadrupole Ion Trap Mass Spectrometer", Shao-Yu Liang, Chou-Hsun Han, Dineshkumar Yograj Turkar, Avinash Adhikrao

Patil, Szu-Wei Chou, Wen-Ping Peng, 64th ASMS Conference on Mass Spectrometry and Allied Topics, June 5 - 9, San Antonio, Texas, USA, 2016 (oral presentation, MOC pm 02:30)

27. "A Novel Charge Detection Rectilinear Ion Trap Mass Spectrometer (CD-RIT MS) for Detection of High Mass Proteins", Avinash Adhikrao Patil, Szu-Wei Chou, Chen-Wei Lee, Wen-Ping Peng, 64th ASMS Conference on Mass Spectrometry and Allied Topics, June 5 - 9, San Antonio, Texas, USA, 2016 (oral presentation, TOB pm 02:50)

28. "Reliable Biomarkers for Identification of Mycobacterium Tuberculosis Complex in Broth Culture Media with Nanodiamond", Hsi-An Chen, Ya-Chin Chin, Po-Chi Soo, Wen-Ping Peng, 64th ASMS Conference on Mass Spectrometry and Allied Topics, June 5 - 9, San Antonio, Texas 2016 (poster, MP-500)

29. "Multiple Biomarkers for Reliable Identification of Mycobacterium Tuberculosis Complex in Broth Culture", Wen-Ping, Peng, The 2016 TB summit, June 21–23, 2016 London, UK (oral presentation)

30. "Measuring Masses of Single Bacterial Whole Cells with Laser Induced Acoustic Desorption Plasma Charge Detection Quadrupole Ion Trap Mass Spectrometer", Shao-Yu Liang, Chou-Hsun Han, Dineshkumar Yograj Turkar, Avinash Adhikrao Patil, Szu-Wei Chou, Wen-Ping Peng, 13th Annual Conference of the Taiwan Society for Mass Spectrometry, Kaohsiung, Taiwan, June 27-29, 2016 (Invited talk)

31. "Reliable Biomarkers for Identification of Mycobacterium Tuberculosis Complex in Broth Culture Media with Nanodiamond", Hsi-An Chen, Ya-Chin Chin, Po-Chi Soo, Wen-Ping Peng, 13th Annual Conference of the Taiwan Society for Mass Spectrometry, Kaohsiung, Taiwan, June 27-29, 2016 (Oral)

32. "Charge Detection Rectilinear Ion Trap Mass Spectrometer", Avinash Adhikrao Patil, Chen-Wei Lee, Szu-Wei Chou, Wen-Ping Peng, 13th Annual Conference of the Taiwan Society for Mass Spectrometry, Kaohsiung, Taiwan, June 27-29, 2016 (poster, PIM-01)

33. "Development of a Charge Detector Rectilinear Ion Trap (CD-RIT) Mass Spectrometer", Avinash A. Patil, Szu-Wei Chou, Chen-Wei Lee, Wen-Ping Peng, Annual Meeting of the Physical Society of Republic of China, January 25~27, Kaohsiung, Taiwan, 2016 (O2-B-07, Oral presentation)

34. "Selective Enrichment of Tuberculosis Biomarkers with Nanodiamond", Ya-Chin Chin, Hsi-An Chen, Po-Chi Soo, Wen-Ping Peng, Annual Meeting of the Physical Society of Republic of China 2016 (P1-BS-038, Poster)

35. "Novel Mass Spectrometric Method to Measure the Intact Mass of Bacteria", Wen-Ping Peng, Mass Spectrometric for Clinical Diagnosis, Kaohsiung, Taiwan, Nov. 5-6 2015 (Invited talk)

36. "Analyzing Biological Mass Spectra with Least-Action Principle", Wen-Ping Peng, The 8th Cross-Strait Conference on Statistical Physics, Hsin-Chu, Taiwan, Sep. 6-8, Aug. 18-20, 2015 (Invited talk)

37. "Measurement of Ion Velocity Distribution with and without Quadrupole Electric Fields", Avinash A. Patil; Sin-Ciang Jiang; Kai-Chun Yen; Szu-Wei Chou; Wen-Ping Peng, 6th Asia Oceania Mass Spectrometry, Brisbane, Australia, July 19-22, 2015 (Invited talk)

38. "Velocity Distribution Measurement of Fullerene Ions with and without Quadrupole Fields", Avinash Patil; Sin-Ciang Jiang; Kai-Chun Yen; Szu-Wei Chou; Wen-Ping Peng; 63th ASMS Conference on Mass Spectrometry and Allied Topics, May 31 - June 4, St. Louis, Missouri 2015 (poster, TP075)

39. "Determining the Binding Ratio of Protein-Ketamine Conjugates with Nanodiamond Mass Spectrometry and Immunizing Mice with the Conjugates", Hsi-An Chen, Tsong-Yung Chou, Shun-Hsing Tuan, Wen-Ping Peng, 63th ASMS Conference on Mass Spectrometry and Allied Topics, May 31 - June 4, St. Louis, Missouri 2015 (poster, MP301)

40. "Ion velocity distribution with and without quadrupole electric fields", Avinash A. Patil, Sin-Ciang Jiang, Kai-Chun Yen, Szu-Wei Chou, Wen-Ping Peng, 12th Annual Conference of the Taiwan Society for Mass Spectrometry, Hsin-Chu, Taiwan, July 13-15, 2015 (Invited talk)

41. "Mass Spectrometry: an emerging tool in biology and chemistry", Wen-Ping Peng, Annual Meeting of the Physical Society of Republic of China, Hsin-Chu, Jan 28-30, 2015 (O4-BS-001, Invited talk)

42. "Factors that affect transmission of high mass MADLI ions in a multi-quadrupoles rectilinear ion trap mass spectrometer", Wen-Ping Peng, Avinash A. Patil, Szu-Wei Chou, Pei-Yu Chang, 20th International Mass Spectrometry Conference, Geneva, Switzerland 2014 (oral TOS14-03, Invited talk)

43. "Screening mycobacterium tuberculosis complex with detonation nanodiamond", Wen-Ping Peng, Ai-Ti Chen, Shih-Chieh Yang, Po-Chi Soo, 20th International Mass Spectrometry Conference, Geneva, Switzerland 2014 (poster MPS06-36)

44. "Guiding high mass MADLI ions in multi-quadrupoles", Wen-Ping Peng, The 5th Asia Oceania Mass Spectrometry Conference & The 33rd Chinese Mass Spectrometry Society Annual Conference, Peking University 2014 (oral)

45. "Mass spectrometric data analysis and algorithm development", Wen-Ping Peng, Shih-Chieh Yang, Ai-Ti Chen, The 11th Taiwan Society for Mass Spectrometry Annual Conference 2014 (oral)

46. "Automatic charge state assignment and boundary determination of electrospray mass spectra", Shih-Chieh Yang, Charlotte Uetrecht, Yao-Shin Tseng, Arjan Barendrget Albert J. R. Heck, Wen-Ping Peng, The 11th Taiwan Society for Mass Spectrometry Annual Conference 2014 (poster PK-35)

47. "Screening the potential MTBC with detonation nanodiamond in a regional hospital", Po-Chi Soo, Ai-Ti Chen, Shih-Chieh Yang, Wen-Ping Peng, The 11th Taiwan Society for Mass Spectrometry Annual Conference 2014 (poster PA-20)

48. "Denosing of a voltage-scan rectilinear ion trap mass spectrometer", Pei-Yu Chang, Avinash A. Patil, Szu-Wei Chou, Wen-Ping Peng, Annual Meeting of the Physical Society of Republic of China 2014 (poster P2-BS-635)

49. "A game theory-based approach search engine to automate the mass assignment in complex native electrospray mass spectra", Yao-Hsin Tseng, Charlotte Uetrecht, Shih-Chieh Yang, Arjan Barendregt, Albert J. R. Heck, Wen-Ping, Peng, Annual Meeting of the Physical Society of Republic of China 2014 (poster P2-BS-036)

50. "A practical aspect in algorithm development by examining fingerprinted mass spectra of clinical acinetobacter baumannii", Wan-Yin Shih, Yu-Ling Deng, Po-Chi Soo, Kai-Chih Chang, Wen-Ping Peng, Annual Meeting of the Physical Society of Republic of China 2014 (poster P2-BS-049)

51. "Mass Spectrometric Techniques for the analysis of Large Biomolecules and Bioparticles", Wen-Ping Peng, 2nd International Conference on Physics of Materials and Materials based Device Fabrication (ICPM MDF 2014, Kolhapur, India, invited talk)

52. "Mass Spectrometric Techniques for the analysis of Large Biomolecules and Bioparticles", Wen-Ping Peng, National Conference on Bioscience and Health Engineering: Current Scenario 2014 Pune, India, Wen-Ping Peng (invited talk)

53. "Extending the detection limit of a voltage-scan rectilinear ion trap mass spectrometer using charge detector", Avinash A. Patil, Szu-Wei Chou, Pei-Yu Chang, Wen-Ping Peng, 4th Asia Oceania Mass Spectrometry Conference & 10th TSMS Annual Conference 2013 (invited talk, WS4.3)

54. "Removal of strong RF field interference by wavelet packet decomposition method in a voltage-scan charge detection rectilinear ion trap mass spectrometer", Szu-Wei Chou, Avinash A. Patil, Pei-Yu Chang, Chun-Yen Cheng, Ming-Lee Chu, Wen-Ping Peng, 4th Asia Oceania Mass Spectrometry Conference & 10th TSMS Annual Conference 2013 (poster, PH15)

55. "Rapid identification of Mycobacterium tuberculosis complex from Mycobacteria Growth Indicator Tube broth using nanodiamonds combined with MALDI-TOF mass

spectrometry", Ching-Jen Kung, Po-Chi Soo, Kai-Chih Chang, Wen-Ping Peng, 60th ASMS conference, Vancouver, BC, Canada 2012 (oral)

56. "Wavelet-based Method for Time Domain Noise Analysis and Reduction in a Frequency Scan Ion Trap Mass Spectrometer", Szu-Wei Chou, Guo-Rung Shiu, Wen-Ping Peng, 60th ASMS conference, Vancouver, BC, Canada 2012 (Poster)

57. "Separating protein mixtures with the Minimax determination in ESI mass spectra", Yao-Hsin Tseng, Albert J. R. Heck, Wen-Ping Peng, 60th ASMS conference, Vancouver, BC, Canada 2012 (Poster)

58. "Investigation of virus uptake by cells with cell mass spectrometry", Hsin-Hung Lin, Shiue-Wen Tsai, Ching-Jen Kung, Wen-Ping Peng, Chung-Hsuan Chen, Alice L. Yu, 60th ASMS conference, Vancouver, BC, Canada 2012 (Poster)

59. "Bacteria mass spectrometry and charge state assignment of virus mass spectra and its tandem mass spectra", Szu-Wei Chou, Yao-Hsin Tseng, Che-Hao Chang, Wen-Ping Peng, The 4th World Chinese Mass Spectrometry Conference and 2012 Taiwan Society for Mass Spectrometry, Tainan, Taiwan, June 28-July 1. 2012 (Invited talk)

60. "Mimicking redox protein function by soft landing Co(Salen) ions on self-assembled monolayer surfaces", Wen-Ping Peng, Grant Johnson, Julia Laskin, 19th International Mass Spectrometry Conference, Kyoto, Sep. 16-21, 2012 (Invited talk)

61. "The Study of Ion Transmission and Soft Landing of Macromolecules Using Multiple Quadrupoles Instrument Coupled with MALDI Ion Source", Ting-Chang Ko, Yao-Hsin Tseng, Wen-Ping Peng, 59th ASMS conference, Denver, Colorado2011 (Oral presentation)

62. "Interpreting the Charge State Assignment in Electrospray Mass Spectra of Bioparticles", Yao-Hsin Tseng; Charlotte Uetrecht; Albert J. R. Heck; Wen-Ping Peng, 59th ASMS conference, Denver, Colorado 2011 (Poster)

63. "Rapid Identification of Acinetobacter Species with Nanodiamond", Chih-Jen Yeh; Chun-Wei Chen; Kai-Chih Chang; Wen-Ping Peng, 59th ASMS conference 2011 (Poster)

64. "Bacterial Mass Spectrometry", Guo-Rung Shiu; Szu-Wei Chou; Wen-Ping Peng, 59th ASMS conference 2011 (Poster)

65. "Quantification Study of Drug Delivery by Nanocarriers", Wen-Ping Peng, 2011 Joint American Vacuum Society (AVS-Taiwan)/ROC Physical Society Annual Meeting: Advances in Nano-Bio Interfaces (Invited Talk)

66. "Quantification Study of Drug Delivery by Nanocarriers", Wen-Ping Peng, National Seminar on Physics of Materials and Materials Based Device Fabrication (NSPM-MDF-2011), Shivaji University, Kolhapur, India (Invited Talk)

67. "Preparation of Monolayer Catalytic Materials on Surfaces in Vacuum using Ion Soft Landing Method", Wen-Ping Peng, Grant Johnson, Peng Wang, Omar Hadjar, Julia Laskin, R. Graham Cooks, 58th ASMS conference 2010 (Oral presentation)

68. "Quantitative Measurement of Nano/Micro Particle Endocytosis with Cell Mass Spectrometry", Huan-Chang Lin, Hsin-Hung Lin, Cai-Yu Kao, Alice L. Yu, Wen-Ping Peng, and Chung-Hsuan Chen, 58th ASMS conference 2010 (Poster)

69. "Charge State Assignment of Electrospray Mass Spectra of Bioparticles", Yao-Hsin Tseng, Charlotte Uetrech, Albert J. R. Heck, Wen-Ping Peng, 1st Asian and Oceanic Mass Spectrometry Conference 2010 (Poster 16P-013)

70. "Quantitative Measurment of Nano/Micro Particle Endocytosis with cell mass spectrometry", Huan-Chang Lin, Hsin-Hung Lin, Cai-Yu Kao, Alice L. Yu, Wen-Ping Peng, and Chung-Hsuan Chen, 1st Asian and Oceanic Mass Spectrometry Conference 2010 (Oral 18B-AS6-1635)

71. "Ion Transmission of Macromolecules Using Multiple Quadrupoles Instrument", Fa-Wei Lan, Ting-Chng Ko, Ming-Lee Chu, Wen-Ping Peng, 1st Asian and Oceanic Mass Spectrometry Conference 2010 (Poster 16P-026)

72. "Quantitative Measurement of Nano-/Microparticle Endocytosis and Catalysis", Wen-Ping Peng, Taiwan Society for Mass Spectrometry 2010 (Invited talk)

73. "Quantitative Measurement of Nano/Micro Particle Endocytosis with Cell Mass Spectrometry", Huan-Chang Lin, Hsin-Hung Lin, Cai-Yu Kao, Alice L. Yu, Wen-Ping Peng, and Chung-Hsuan Chen, Annual Meeting of the Physical Society of Republic of China 2010 (Invited talk, Oral G2-1)

74. "Charge State Assignment of Electrospray Mass Spectra of Bioparticles", Yao-Hsin Tseng, Wen-Ping Peng, Charlotte Uetrech, Albert J. R. Heck, Annual Meeting of the Physical Society of Republic of China 2010 (Poster GP-35)

75. "Ion Transmission of High Mass Biomolecules in a Multiple Quadrupoles Instrument", Fa-Wei Lan, Ting-Chng Ko, Wen-Ping Peng, Annual Meeting of the Physical Society of Republic of China 2010 (Poster GP-36)

76. "Diamond Nanoparticles for MALDI-TOF Mass Analysis of Bacterial Surface and Secretion Proteins", C.-W. Chen, K.-C. Chang, A. Hu, Y.-P, Ho, W.-P. Peng, 57th ASMS conference 2009 (Poster ThP-371)

77. "Ion Soft Landing Instrumentation", Wen-Ping Peng, Taiwan Society for Mass Spectrometry 2009 (Invited talk)

78. "Measuring the Quantity of Gold Nanoparticles Uptake into Mammalian Cells by Mass Spectrometry", H.-C. Lin, H.-H. Lin, C.-Y. Kao, A. L. Yu., W.-P. Peng, C.-H. Chen, 57th ASMS conference 2009 (Poster WP-582)

79. "High throughput mass-selective soft landing with rectilinear ion trap in RF/DC isolation mode", Z. Nie, M. Goodwin, W.-P. Peng, M. Volny, Z. Ouyang, R. G. Cooks, 56th ASMS conference 2008, Instrumentation (Poster WP-031)

80. "Preparation of novel catalysts using soft landing of mass-selected ions on surfaces", J. Laskin, P. Wang, Z. Yang, O. Hadjar, W.-P. Peng, R. G. Cooks, 56th ASMS conference 2008, Instrumentation (Poster Thp-014)

81. "Ion soft landing using novel rectilinear ion trap mass spectrometer", W.-P. Peng, M. Goodwin, Z.Nie, M. Volny, Z. Ouyang, R. G. Cooks, 2008 Taiwan Society for Mass Spectrometry Annual symposium (Poster PA-013)

82. "APTDI of Organometallic Complexes for Novel high Throughput mass spectrometer", W. –P. Peng, M. Goodwin, H. Chen, R. G. Cooks, 55th ASMS conference 2007, Ion Molecule Reaction (Poster, WP 119)

83. "Charge detection mass spectrometry of microparticles", W.-P. Peng, M.-L. Chu, H. -C. Lin, H.-C. Chang, and C.-H. Winston Chen, 54th ASMS conference 2006, Novel MS Instrumentation (Oral presentation)

84. "Determination of molar masses and molar mass distributions of polystyrene size standards with a quadrupole ion trap", W.-P. Peng, Y.-C. Yang, M.-W. Kang, C.-W Lin, Y.T. Lee, and H.-C. Chang, 53nd ASMS conference 2005, Instrumentation: Quads & Traps (Poster)

85. "Bacterial cluster ions: generation and identification in a quadrupole ion trap", W.-P. Peng, Y.-C. Yang, M.-W. Kang, and H.-C. Chang, Gordon Research Conferences 2004 (Poster)

86. "Measuring masses of single bacterial whole cells in vacuo", W.-P. Peng, I.-C. Yang, Y. T. Lee, and H.-C. Chang, 52nd ASMS conference 2004, Novel MS instrumentation (Oral session)

87. "Ion Trap Mass Spectrometry of Fluorescently Labeled Nanoparticles and High-Mass Biomolecules", W.-P. Peng, Y. Cai, H.-C. Chang, 51st Annual Conference on Mass

Spectrometry and Allied Topics (ASMS) 2003, Novel MS instrumentation (Oral session)

88. "High Voltage Amplifier", J. W. Ting, W.-P. Peng, and H.-C. Chang, IEEE 2003 Nuclear Science Symposium & Medical Image Conference (poster)

89. "Characterization of single nanoparticles in an electrodynamic trap," W.-P. Peng, S.-J. Kuo, and H. C. Chang, 中國化學年會89年會, o-25 (oral presentation)

90. "Ion trap mass spectrometry of fluorescently labeled nanoparticles," W.-P. Peng, Y. Cai, H.-C. Chang, 中國化學年會70週年年會, o-an-006 (oral presentation)

91. "Liquid-glass transition in charge-stabilized colloidal dispersions," S.K. Lai, G. F. Wang, and W.-P. Peng, AIP conference proceedings – June 22, 2000 – Volume 519, Issus 1 pp. 99-110 (oral session)