

# 科技部個人資料表

1. 個人資料 (C301 至 C304 表) 均將收錄於本部研究人才資料庫，供本部學術補助獎勵業務使用。
2. 依據政府資訊公開法第七條第九款，您於本部核定通過之獎補助案件其計畫名稱、核定金額、執行期限、成果報告等將公開於本部網站供外界查詢。
3. 基於促進學術交流之公共利益，您的中英文姓名、服務機關、職稱、聯絡電話 (公) 及著作目錄 (C302 表) 將公開於本部網站供外界查詢，其餘個人資料如 E-mail、學歷、經歷等您可自行設定是否公開 (請至本部學術研發服務網→個人資料維護→基本資料 C301 中進行設定)。
4. 基於執行機構學術著作資源典藏需求之公共利益，著作目錄 (C302 表) 將提供現任職機構查詢及下載。

## 一、基本資料

簽名： 吳章甫

列印日期： 2021/10/04

身分證號碼			
中文姓名	吳章甫	英文姓名	Chang-fu Wu
			(First Name, Middle Name) (Last Name)
國籍	中華民國	性別	<input checked="" type="checkbox"/> 男 <input type="checkbox"/> 女 出生日期
聯絡地址	100 台北市中正區徐州路 17 號 717 室		
聯絡電話	(公) 02-3366-8096 (宅 / 手機) 02-3366-8096		
傳真號碼	02-3366-8096	E-mail	changfu@ntu.edu.tw

## 二、主要學歷

由最高學歷依次填寫，若仍在學者，請在學位欄填「肄業」。

學校名稱	國別	主修學門系所	學位	起訖年月(西元年 / 月)
University of Washington	U.S.	Environmental Health/Industrial Hygiene	Ph.D.	自 1998/12 至 2002/06
University of Washington	U.S.	Environmental Health/Industrial Hygiene	M.S.	自 1996/09 至 1998/12
National Taiwan University	Taiwan	Public Health	B.S.	自 1990/09 至 1994/06

## 三、現職及與專長相關之經歷

指與研究相關之專任職務，請依任職之時間先後順序由最近者往前追溯。

服務機構	服務部門/系所	職稱	起訖年月(西元年 / 月)
現職： 國立臺灣大學公共衛生學院環境與職業健康科學研究所	國立臺灣大學公共衛生學院環境與職業健康科學研究所	教授且兼任所長	自 2019/08
經歷：			
國立臺灣大學公共衛生學院職業醫學與工業衛生研究所	國立臺灣大學公共衛生學院職業醫學與工業衛生研究所	教授	自 2017/08 至 2019/07
國立臺灣大學	公共衛生學院環境衛生研究所	教授	自 2014/08 至
國立臺灣大學公共衛生學院職業醫學與工業衛生研究所	國立臺灣大學公共衛生學院職業醫學與工業衛生研究所	教授	自 2014/08 至
國立台灣大學	公共衛生學系	副教授	自 2008/08 至 2014/07
國立台灣大學	公共衛生學系	助理教授	自 2004/08 至 2008/07
University of Washington	Department of Environmental and Occupational Health Sciences	Affiliate Faculty	自 2004/08 至 2017/06
University of Washington	Department of Environmental and Occupational Health Sciences	Research Associate	自 2002/07 至 2004/07

**四、專長** 請填寫與研究方向有關之學術專長名稱。

1. 環境衛生	2. 健康風險評估	3. 工業安全衛生學	4. 化學性環境評估
---------	-----------	------------	------------

# 吳章甫

## 著作目錄

### 期刊論文

1. Kuo, C.P., Fu, J.S., Wu, P.C., Cheng, T.J., Chiu, T.Y., Huang, C.S., Wu, C.F., Lai, L.W., Lai, H.C., Liang, C.K. (2021, Sep). Quantifying Spatial Heterogeneity of Vulnerability to Short-Term PM<sub>2.5</sub> Exposure with Data Fusion Framework. *Environmental Pollution*, 285, 117266.
2. Huang, C.S., Liao, H.T., Lin, T.H., Chang, J.C., Lee, C.L., Yip, E.C.W., Wu, Y.L., Wu, C.F. (2021, Aug). Evaluation of Using Satellite-Derived Aerosol Optical Depth in Land Use Regression Models for Fine Particulate Matter and Its Elemental Composition. *Atmosphere*, 12, 1018. 本人為通訊作者.
3. Chang, T.Y., Tsai, C.C., Wu, C.F., Chang, L.T., Chuang, K.J, Chuang, H.C., Young, L.H. (2021, May). Land-use Regression Models to Estimate Particle Mass and Number Concentrations in Taichung, Taiwan. *Atmospheric Environment*, 252, 118303.
4. Liao, H.T., Lee, C.L., Tsai, W.C., Yu, J.Z., Tsai, S.W., Chou, C.C., Wu, C.F. (2021, Apr). Source Apportionment of Urban PM<sub>2.5</sub> using Positive Matrix Factorization with Vertically Distributed Measurements of Trace Elements and Nonpolar Organic Compounds. *Atmospheric Pollution Research*, 12(4), 200-207. 本人為通訊作者.
5. Liao, H.T., Chuang, M.T., Tsai, P.W., Chou, C.C., Wu, C.F. (2021, Mar). Enhanced Receptor Modeling using Expanded Equations with Parametric Variables for Secondary Components of PM<sub>2.5</sub>. *Aerosol and Air Quality Research*, 21, 200549. 本人為通訊作者.
6. Wu, T.G., Chang, J.C., Huang, S.H., Lin, W.Y., Chan, C.C., Wu, C.F. (2021, Feb). Exposures and Health Impact for Bicycle and Electric Scooter Commuters in Taipei. *Transportation Research Part D: Transport and Environment*, 91, 102696. 本人為通訊作者.
7. Chuang, H.C., Chen, H.C., Cha, P.J., Liao, H.T., Wu, C.F., Chen, C.L., Jhan, M.K., Hsieh, H.I., Wu, K.Y., Chen, T.F., Cheng, T.J. (2020, Nov). Neuropathology Changed by 3- and 6-months Low-level PM<sub>2.5</sub> Inhalation Exposure in Spontaneously Hypertensive Rats. *Particle and Fibre Toxicology*, 17, 59.
8. Liao, H.T., Chang, J.C., Tsai, T.T., Tsai, S.W., Chou, C.C., Wu, C.F. (2020, Jul).

- Vertical Distribution of Source Apportioned PM<sub>2.5</sub> Using Particulate-Bound Elements and Polycyclic Aromatic Hydrocarbons in an Urban Area. *Journal of Exposure Science and Environmental Epidemiology*, 30, 659–669. 本人為通訊作者.
9. Liao, H.T., Wu, C.F. (2020, Feb). Trajectory-Assisted Source Apportionment of Winter-Time Aerosol Using Semi-continuous Measurements. *Archives of Environmental Contamination and Toxicology*, 78(3), 430-438. 本人為通訊作者.
  10. Chang, T. Y., Liang, C. H., Wu, C. F., Chang, L. T. (2019, Oct). Application of Land-use Regression Models to Estimate Sound Pressure Levels and Frequency Components of Road Traffic Noise in Taichung, Taiwan. *Environment International*, 131, 104959.
  11. Yang, J. C., Chang, P. E., Ho, C. C., Wu, C. F. (2019, Oct). Application of Factor and Cluster Analyses to Determine Source-receptor Relationships of Industrial Volatile Organic Odor Species in a Dual-optical Sensing System. *Atmospheric Measurement Techniques*, 12(10), 5347-5362. 本人為通訊作者.
  12. Liao, H. T., Chang, J. C., Tsai, T. T., Tsai, S. W., Chou, C. C., Wu, C. F. (2019, Jun). Vertical Distribution of Source Apportioned PM<sub>2.5</sub> Using Particulate-bound Elements and Polycyclic Aromatic Hydrocarbons in an Urban Area. *Journal of Exposure Science & Environmental Epidemiology*. 本人為通訊作者.
  13. Huang, C. S., Lin, T. H., Hung, H., Kuo, C. P., Ho, C. C., Guo, Y. L., Chen, K. C., Wu, C. F. (2019, Apr). Incorporating Satellite-derived Data with Annual and Monthly Land Use Regression Models for Estimating Spatial Distribution of Air Pollution. *Environmental Modelling & Software*, 114, 181-187. 本人為通訊作者.
  14. Lee, Celine S. L., Chou, C. C. K., Cheung, H. C., Tsai, C. Y., Huang, W. R., Huang, S. H., Chen, M. J., Liao, H. T., Wu, C. F., Tsao, T. M., Tsai, M. J., Su, T. C. (2019, Mar). Seasonal Variation of Chemical Characteristics of Fine Particulate Matter at a High-elevation Subtropical Forest in East Asia. *Environmental Pollution*, 246, 668-677.
  15. Kallawicha, K., Chuang, Y. C., Lung, S. C. C., Wu, C. F., Han, B. C., Ting, Y. F., Chao, H. J. (2018, Aug). Outpatient Visits for Allergic Diseases Are Associated with Exposure to Ambient Fungal Spores in the Greater Taipei Area. *Aerosol and Air Quality Research*, 18(8), 2077-2085.
  16. Tsao, T.M., Tsai, M.J., Hwang, J.S., Cheng, W.F., Wu, C.F., Chou, C. C.-K., Su, T.C. (2018, Mar). Health Effects of a Forest Environment on Natural Killer Cells in Humans: An Observational Pilot Study. *Oncotarget*, 9, 16501-16511.
  17. Gasparrini, A., Guo, Y., Sera, F., Vicedo-Cabrera, A. M., Huber, V., Tong, S., de

- Sousa Zanotti Stagliorio Coelho, M., Nascimento Saldiva, P. H., Lavigne, E., Matus Correa, P., Valdes Ortega, N., Kan, H., Osorio, S., Kysely, J., Urban, A., Jaakkola, J. J. K., Ryti, N. R. I., Pascal, M., Goodman, P. G., Zeka, A., Michelozzi, P., Scortichini, M., Hashizume, M., Honda, Y., Hurtado-Diaz, M., Cesar Cruz, J., Seposo, X., Kim, H., Tobias, A., Iniguez, C., Forsberg, B., Astrom, D. O., Ragetti, M. S., Guo, Y. L., Wu, C. F., Zanobetti, A., Schwartz, J., Bell, M. L., Dang, T. N., Van, D. D., Heaviside, C., Vardoulakis, S., Hajat, S., Haines, A., Armstrong, B. (2017, Dec). Projections of Temperature-related Excess Mortality Under Climate Change Scenarios. *Lancet Planet Health*, 1(9), e360-e367.
18. Wu, C. F., Woodward, A., Li, Y. R., Kan, H. D., Balasubramanian, R., Latif, M. T., Sahani, M., Cheng, T. J., Chio, C. P., Taneepanichskul, N., Kim, H., Chan, C. C., Yi, S. M., Withers, M., Samet, J. (2017, Nov). Regulation of Fine Particulate Matter (PM<sub>2.5</sub>) in the Pacific Rim: Perspectives from the APRU Global Health Program. *Air Quality Atmosphere and Health*, 10(9), 1039-1049. 本人為第一作者。
19. Armstrong, B., Bell, M. L., de Sousa Zanotti Stagliorio Coelho, M., Leon Guo, Y. L., Guo, Y., Goodman, P., Hashizume, M., Honda, Y., Kim, H., Lavigne, E., Michelozzi, P., Hilario Nascimento Saldiva, P., Schwartz, J., Scortichini, M., Sera, F., Tobias, A., Tong, S., Wu, C. F., Zanobetti, A., Zeka, A., Gasparri, A. (2017, Oct). Longer-Term Impact of High and Low Temperature on Mortality: An International Study to Clarify Length of Mortality Displacement. *Environmental Health Perspectives*, 125(10), 107009.
20. Guo, Y. M., Gasparri, A., Armstrong, B. G., Tawatsupa, B., Tobias, A., Lavigne, E., Coelho, M. D. Z. S., Pan, X. C., Kim, H., Hashizume, M., Honda, Y., Guo, Y. L. L., Wu, C. F., Zanobetti, A., Schwartz, J. D., Bell, M. L., Scortichini, M., Michelozzi, P., Punnasiri, K., Li, S. S., Tian, L. W., Garcia, S. D. O., Seposo, X., Overcenco, A., Zeka, A., Goodman, P., Dang, T. N., Dung, D. V., Mayvaneh, F., Saldiva, P. H. N., Williams, G., Tong, S. L. (2017, Aug). Heat Wave and Mortality: A Multicountry, Multicommunity Study. *Environmental Health Perspectives*, 125(8).
21. Liao, H.T., Wu, C.F. (2017, Aug). Investigation of Source Locations and Contributions Using an Integrated Trajectory Source Apportionment Method with Multiple Time Resolution Data. *International Journal of Environmental Science and Technology*, 14(8), 1781–1786. 本人為通訊作者。
22. Liao, H.T., Yau, Y.C., Huang, C.S., Chow, J.C., Watson, J.G., Chou, C.C.K., Wu, C.F. (2017, Aug). Source Apportionment of Urban Air Pollutants Using Constrained Receptor Models with a Priori Profile Information. *Environmental*

- Pollution*, 227, 323-333. 本人為通訊作者.
23. Liao, H.T., Chou, C.C.K., Huang, S.H., Lu, C.J., Chen, C.C., Hopke, P.K., Wu, C.F. (2017, Jul). Source Apportionment of PM<sub>2.5</sub> Size Distribution and Composition Data from Multiple Stationary Sites Using a Mobile Platform. *Atmospheric Research*, 190, 21-28. 本人為通訊作者.
  24. Ho, C.C., Chan, C.C., Chio, C.P., Lai, Y.C., Chang-Chien, G.P., Chow, J.C., Watson, J.G., Chen, L.W.A., Chen, P.C., Wu, C.F. (2016, Nov). Source Apportionment of Mass Concentration and Inhalation Risk with Long-Term Ambient PCDD/Fs Measurements in an Urban Area. *Journal of Hazardous Materials*, 317: 180-187. 本人為通訊作者.
  25. Wu, C.F., Shen, F.H., Li, Y.R., Tsao, T.M., Tsai, M.J., Chen, C.C., Hwang, J.S., Hsu, S.H.J., Chao, H., Chuang, K.J., Chou, C.C.K., Wang, Y.N., Ho, C.C., Su, T.C. (2016, Nov). Association of Short-Term Exposure to Fine Particulate Matter and Nitrogen Dioxide with Acute Cardiovascular Effects. *Science of The Total Environment*, 569–570: 300-305. 本人為第一作者、通訊作者.
  26. Yang, J.C., Chang, P.E., Chie, W.C., Liu, J.P., Wu, C.F. (2016, Nov). Large-Scale Search Method for Locating and Identifying Fugitive Emission Sources in Petrochemical Processing Areas. *Process Safety and Environmental Protection*, 104, Part A: 382-394. 本人為通訊作者.
  27. Lai, T.C., Chiang, C.Y., Wu, C.F., Yang, S.L., Liu, D.P., Chan, C.C., Lin, H.H. (2016, Jan). Ambient Air Pollution and Risk of Tuberculosis: a Cohort Study. *Occupational and Environmental Medicine*, 73: 56-61.
  28. Li, Y.R., Feng, L.T., Chen, B.Y., Kim, H., Yi, S.M., Guo, Y.L., Wu, C.F. (2016, Jan). Association of Urban Particle Numbers and Sources with Lung Function among Children with Asthma or Allergies. *Science of The Total Environment*, 542, Part A: 841-844. 本人為通訊作者.

## 專書

1. Jan Kyselý, Aleš Urban, Jouni J K Jaakkola, Niilo R I Rytty, Mathilde Pascal, Patrick G Goodman, Ariana Zeka, Paola Michelozzi, Matteo Scortichini, Masahiro Hashizume, Yasushi Honda, Magali Hurtado-Diaz, Julio Cruz, Xerxes Seposo, Ho Kim, Aurelio Tobias, Carmen Íñiguez, Bertil Forsberg, Daniel Oudin Åström, Martina S Ragetti, Martin Röösl, Yue Leon Guo, CHANG-FU WU, Antonella Zanobetti, Joel Schwartz, Michelle L Bell, Tran Ngoc Dang, Dung Do Van, Clare Heaviside, Sotiris Vardoulakis, Shakoob Hajat, Andy Haines, Ben Armstrong, Kristie L Ebi, Antonio Gasparrini. *Temperature-related mortality impacts under and beyond Paris Agreement climate change scenarios* .

SPRINGER. Oct, 2018.

研討會論文

1. Tsai, W.C., Lee, J.L., Liao, H.T., Wu, C.F. (2019, Oct). Vertical Concentration Variation of PM<sub>2.5</sub>-bound Non-polar Organic Compounds in Taipei. ISEE-ISES AC, Daegu, Korea. 本人為通訊作者.
2. Wu, T.G., Chio, C.P., Wu, C.F., Chan, C.C., Lin, K.T. (2019, Oct). Pilot-study on PM<sub>2.5</sub> Low-cost Sensor in the Households in Changhua, Taiwan. ISEE-ISES AC, Daegu, Korea. 本人為通訊作者.
3. Lin, H.C., Wang, G.S., Shang, Y.M., Huang, C.S., Wang, D.W., Wang, T.H., Hsu, Y.C., Wu, C.F. (2019, Aug). Source Characterization and Apportionment of River Pollution in Central Taiwan. ISESISIAQ, Kaunas, Lithuania. 本人為通訊作者.
4. Tsai, W.C., Liao, H.T., Wu, C.F. (2019, Aug). Evaluating Vertical Concentration Variation of Non-polar Organic Compounds for PM<sub>2.5</sub> in Taipei Metropolis. ISESISIAQ, Kaunas, Lithuania. 本人為通訊作者.
5. Wu, C.F., Wu, T.G., Chen, B.H., Chang, J.C., Chang, C.C. (2019, Aug). Applying Land Use Regression Models with a Mobile Platform in Cycle Network to Estimate PM<sub>2.5</sub> Spatial Variation in Taipei, Taiwan. ISESISIAQ, Kaunas, Lithuania. 本人為第一作者、通訊作者.
6. Wu, T.G., Chang, J.C., Wu, C.F., Chan, C.C. (2019, Aug). PM<sub>2.5</sub> Exposures in Different Routes for Bike and Scooter Commuters in Taipei, Taiwan. ISESISIAQ, Kaunas, Lithuania. 本人為通訊作者.
7. Wu, C.F., Kao, W.C., Wu, S.Y. (2019, May). Characterizing Vertical Variation of PM<sub>2.5</sub> Concentrations and Compositions at a Building in Taipei. Asian Aerosol Conference, Hong Kong, China. 本人為第一作者、通訊作者.
8. Chen, Y.D., Liao, H.T., Wu, C.F. (2018, Jun). Feasibility of Positive Matrix Factorization for 3-Layer Simulation with Vertical Variation. ISEE/ES AC, Taipei, Taiwan. 本人為通訊作者.
9. Wu, S.Y., Tsai, T.T., Chang, J.C., Ho, C.C., Liao, H.T., Wu, C.F. (2018, Jun). Vertical Variation of PM<sub>2.5</sub>-Bound Polycyclic Aromatic Hydrocarbons in Taipei, Taiwan. A&WMA 111th Annual Conference & Exhibition, Hartford, CT. 本人為通訊作者.
10. Wu, C.F., Wu, T.G., Ho, S.H., Chan, C.C. (2017, Oct). Exposure Assessment of PM<sub>2.5</sub> and Benzene in Bike Lanes in Taipei. ISES annual conference, Research Triangle Park, NC. 本人為第一作者、通訊作者.
11. Chen, Y.D., Liao, H.T., Wu, C.F. (2017, Jul). Receptor Modeling of VOCs, PM<sub>2.5</sub> and Gaseous Pollutants with Contribution Constraint. Asian Aerosol

- Conference, Jeju, Korea. 本人為通訊作者.
12. Liao, H.T., Hopke, P.K., Wu, C.F. (2017, Jul). Numerical Methods for Factor Characterization in Source Apportionment Studies. Asian Aerosol Conference, Jeju, Korea. 本人為通訊作者.
  13. Liao, H.T., Wu, C.F. (2017, Jul). Quantification of Long-range Transported Secondary Aerosols Using an Integrated Trajectory-Source Apportionment Method. Asian Aerosol Conference, Jeju, Korea. 本人為通訊作者.
  14. Liao, H.T., Yau, Y.C., Wu, C.F. (2016, Sep). Source Apportionment of Air Pollutants Using a Constrained Positive Matrix Factorization Model with Multiple Time Resolution Data. International Conference on Aerosol Science and Technology, Taipei, Taiwan. 本人為通訊作者.
  15. Wu, T.G., Chan, C.C., Ho, S.H., Wu, C.F. (2016, Aug). Monitoring BTEX Concentration at bus stops in Taipei, Taiwan with portable VOC analyzers. National Ambient Air Monitoring Conference, St Louis, MO. 本人為通訊作者.
  16. Wu, C.F. (2016, Jun). Land use regression modeling with vertically stratified measurements for PM<sub>2.5</sub> elements: experience in Taiwan. Conference of the ISEE/ISES Asia Chapter, Sapporo, Japan. 本人為第一作者、通訊作者.