

Curriculum Vitae

TZAI-HUNG WEN

Address: Room No. 501, Department of Geography, National Taiwan University (NTU)

No. 1 Sec. 4 Roosevelt Rd., Taipei, 10617 Taiwan

Phone: +886-2-3366-5847 E-mail: wenthung@ntu.edu.tw

URL: http://homepage.ntu.edu.tw/~wenthung

ResearcherID: http://www.researcherid.com/rid/H-2635-2018

ORCID iD: https://orcid.org/0000-0002-9151-8336

EDUCATION

Ph.D.	Bioenvironmental Systems Engineering, National Taiwan University	2000-2006
M.S.	Agricultural Engineering, National Taiwan University	1996-1998
B.S.	Agricultural Engineering, National Taiwan University	1992-1996

MAJOR FIELDS

Geographic information science (GISc); Spatial-temporal analysis;

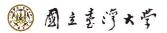
Geographies of diseases; Spatial epidemiology; Urban analytics and environmental sensing

APPOINTMENTS

Professor	2017- present	NTU Department of Geography,
Associate Professor	2013-2017	NTU Department of Geography
Assistant Professor	2009-2013	NTU Department of Geography
Project Assistant Professor	2008-2009	NTU Institute of Epidemiology
Postdoctoral Fellow	2007-2008	Research Center for Humanities and Social Sciences (RCHSS), Academia Sinica

ACADEMIC DIRECTORSHIP

2021 - present	Director, NTU Spatial Information Research Center
2018 - present	Chairperson, NTU Department of Geography
2014 - 2017	Division Director, NTU Global Change Research Center
2010 - 2018	Division Director, NTU Center for Population and Gender Studies



AFFILIATED FACULTY

2021 - present	Center for Teacher Education, NTU Office of Academic Affairs
2013 - present	Master Program in Statistics, National Taiwan University (NTU)
2009 - present	MOHW-NTU Infectious Disease Research and Education Center
2008 - 2009	Department of History, National Chengchi University (NCCU)

AWARDS AND HONORS

2019: NTU Reward for Excellent Senior Teachers

2018: MOST Press Conference

2018: NTU Outstanding Teaching Award

2017: MOST Futuristic Breakthrough Technology Award

2016-2021: NTU Faculty Merit Pay

2015: MOST Ta-You Wu Memorial Award

2014-2016: MOST Excellent Young Investigator Grant

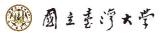
2016, 2013, 2011: NTU Excellence in Teaching Award

JOURNAL EDITORIAL BOARD

2020 - present	Editor-in-chief, Journal of Population Studies
2018 - present	Academic Editor, PLOS ONE
2018 - present	Editorial Board (Biostatistics and Methods), BMC Public Health
2015 - 2018	Editorial Board, Journal of Geographical Science
2013 - 2017	Editor-in-chief, Bulletin of the Geographical Society of China
2011 - 2019	Editorial Board/Deputy Editor, Journal of Population Studies

ACADEMIC OUTREACH

2020 - present	Council Member, Chinese Federation of Surveying & Mapping
2019 - present	Chairman, Chinese Cartographic Association
2019 - present	National Committee (Chinese Taipei) of International Geographical Union
2018 - present	Council Member, Taiwan Geographic Information Society (TGIS)
2018 - 2020	Open Government Data Consultation Committee, Taiwan EPA
2018 - 2019	MOST Grant Review Committee on Regional Science & Geography
2018 - 2020	MOST Grant Review Committee on Geospatial Information Technology
2017 - 2019	Secretary-General, Chinese Cartographic Association
2017 - present	Executive Council Member/Supervisor, Population Association of Taiwan
2017 - present	Council Member (as Chairman since 2019/08), Geographical Society
2016 - present	National Mosquito-Borne Diseases Control Research Center
2013 - present	College Entrance Examination Center (CEEC), Taiwan
2012 - present	Editorial Board for High-School Geography Textbooks

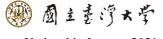


PUBLICATION LIST

(A). Peer-reviewed Journal Articles

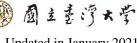
* Corresponding author

- Kuo FY, Wen TH * (2021), Regionalization for Infection Control: An Algorithm for Delineating Containment Zones Considering the Regularity of Human Mobility, *Applied Geography* 126:102375
- 2. Chan CH, Chu TH, Wu JH P, **Wen TH** * (2021). Spatially Characterizing Major Airline Alliances: A Network Analysis", *ISPRS International Journal of Geo-Information* 10(1):37
- 3. Liao HY, Wen TH * (2020), Extracting Urban Water Bodies from High-resolution Radar Images: Measuring the Urban Surface Morphology to Control for Radar's Double-bounce Effect, *International Journal of Applied Earth Observations and Geoinformation* 85:102003.
- 4. Hossain MP, Junus A, Zhu X, Jia P, **Wen TH**, Pfeiffer D, Yuan HY (2020), The Effects of Border Control and Quarantine Measures on the Spread of COVID-19, *Epidemics* 32: 100397.
- 5. Jiang JA, Wang JC, Hsieh CL, Tseng KS, Ye ZW, Su LK, Sun CH, **Wen TH**, Juang JY (2020), An Alternative Body Temperature Measurement Solution: Combination of a Highly Accurate Monitoring System and a Visualized Public Health Cloud Platform, *IEEE Internet of Things Journal* (Early Access) doi:10.1109/JIOT.2020.3034024
- 6. Chiang YL, Wang JC, Sun CH, **Wen TH**, Juang JY, Jiang JA (2020), Mobile Measurement of Particulate Matter Concentrations on Urban Streets: System Development and Field Verification, *IEEE Access* 8:197617–197629
- 7. Yuan HY, Liang J, Lin PS, Sucipto K, Tsegaye MM, Wen TH, Pfeiffer S, Pfeiffer D (2020), The Effects of Seasonal Climate Variability on Dengue Annual Incidence in Hong Kong: A Modelling Study, *Scientific Reports* 10: 4297.
- 8. Cheng YC, Lee FJ, Hsu YT, Slud EV, Hsiung CA, Chen CH, Liao CL, **Wen TH**, Chang CW, Chang JH, Wu HY, Chang TP, Lin PS, Ho HP, Hung WF, Chou JD, Tsou HH (2020), Real-Time Dengue Forecast for Outbreak Alerts in Southern Taiwan, *PLOS Neglected Tropical Diseases* 14(7): e0008434.
- 9. Tsoua HH, Cheng YC, Yuan HY, Ya-Ting Hsu, Wu HY, Lee FJ, Hsiung CA, Chen WJ, Sytwu HK, Wu SI, Shih SM, Wen TH, Kuo SC (2020), The Effect of Preventing Subclinical Transmission on the Containment of COVID-19: Mathematical Modeling and Experience in Taiwan, *Contemporary Clinical Trials* 96: 106101.
- 10. Ng TC, **Wen TH** * (2019), Spatially Adjusted Time-varying Reproductive Numbers: Understanding the Geographical Expansion of Urban Dengue Outbreaks, *Scientific Reports* 9: 19172.

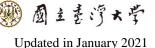


- 11. Ng IC, **Wen TH** *, Yang ST, Fang CT *, Hsueh PR (2019), Detecting Tuberculosis Clusters in Urban Neighborhoods, Taipei, Taiwan: Linking Geographic and Genotyping Evidence, *Applied Geography* 104: 56-64.
- 12. Yuan HY, **Wen TH**, Kung YH, Tsou HH, Chen CH, Chen LW, Lin PS (2019), Prediction of Annual Dengue Incidence by Hydro-Climatic Extremes for Southern Taiwan, *International Journal of Biometeorology* 63(2): 259-268.
- 13. Chen TH, Chen YJ, **Wen TH** * (2018), Revisiting the Role of Rainfall Variability and its Interactive Effects with the Built Environment in Urban Dengue Outbreaks, *Applied Geography* 101(12):14-22.
- 14. **Wen TH** *, Hsu CS, Hu MC (2018), Evaluating Neighborhood Structures for Modeling Intercity Diffusion of Large-scale Dengue Epidemics, *International Journal of Health Geographics* 17:9.
- 15. Kuo FY, Wen TH *, Sabel C (2018), Characterizing Diffusion Dynamics of Disease Clustering: A Modified Space-Time DBSCAN (MST-DBSCAN) Algorithm, *Annals of the American Association of Geographers* 108(4):1168-1186.
- 16. Ko HY, Li YT, Chao DY, Chang YC, Li ZR, Wang M, Kao CL, Wen TH, Shu PY, Chang GJ, King CC (2018), Inter- and Intra-Host Sequence Diversity Reveal the Emergence of Viral Variants during an Overwintering Epidemic Caused by Dengue Virus Serotype 2 in Southern Taiwan, *PLOS Neglected Tropical Diseases* 12(10): e0006827.
- 17. Chin WC, **Wen TH** *, Sabel C, Wang IH (2017), A Geo-computational Algorithm for Exploring the Structure of Diffusion Progression in Time and Space, *Scientific Reports* 7:12565.
- 18. **Wen TH** *, Chin WC, Lai PC (2017), Understanding the Topological Characteristics and Flow Complexity of Urban Traffic Congestion, *PHYSICAA: Statistical Mechanics and Its Applications* 473:166-177.
- 19. Lan YC, **Wen TH**, Chang CC, Liu HF, Lee PF, Huang CY, Chomel BB, Chen YM (2017), Indigenous Wildlife Rabies in Taiwan: Ferret Badgers, a Long-term Terrestrial Reservoir, *BioMed Research International*, Vol. 2017, Article ID 5491640. https://doi.org/10.1155/2017/5491640.
- 20. Chen TH, **Wen TH***, Fang CT, Chan PC (2017), Assessing Infection Risk of Tuberculosis (TB) Contacts in Different Case-contact Contexts, *Taiwan Journal of Public Health* 36(2): 107-121
- 21. **Wen TH** *, Tsai CT #, Chin WC (2016), Evaluating the Role of Disease Importation in the Spatiotemporal Transmission of Indigenous Dengue Outbreak, *Applied Geography* 76: 137–146.

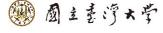




- 22. Lin CH, Wen TH*, Teng HJ, Chang NT (2016), The Spatio-temporal Characteristics of Potential Dengue Risk Assessed by Aedes aegypti and Aedes albopictus in High-epidemic Areas, Stochastic Environmental Research and Risk Assessment 30(8): 2057–2066
- 23. Tsai KH, Chang SF, Yen TY, Shih WL, Chen WJ, Wang HC, Yu XJ, Wen TH, Wu WJ, Shu PY. (2015), Prevalence of antibodies against Ehrlichia spp. and Orientia tsutsugamushi in small mammals around harbors in Taiwan. Parasites & Vectors 9:45.
- 24. Lin MH, Kuo RN, Chin WCB, Wen TH * (2016), Profiling the patient flow for seeking healthcare in Taiwan: using gravity modeling to investigate the influences of travel distance and healthcare resources, *Taiwan Journal of Public Health* 35(2):136-151. (in Chinese) (selected as a Recommended Reading Article)
- 25. Wen TH*, Lin MH, Teng HJ, Chang NT (2015), Incorporating the Human-Aedes Mosquito Interactions into Measuring the Spatial Risk of Urban Dengue Fever, Applied Geography 62:256-266
- 26. Wen TH*, Chin CB (2015), Incorporation of Spatial Interactions in Location Networks to Identify Critical Geo-Referenced Routes for Assessing Disease Control Measures on a Large-Scale Campus, International Journal of Environmental Research and Public Health 12, 4170-4184
- 27. Chin CB, Wen TH * (2015), Geographically Modified PageRank Algorithms: Identifying the Spatial Concentration of Human Movement in a Geospatial Network, *PLOS ONE* 10(10): e0139509.
- 28. Chiu CH, Wen TH, Chien LC, Yu HL (2014), A Probabilistic Spatial Dengue Fever Risk Assessment by a Threshold based-Quantile Regression Method, *PLOS ONE* 9(10): e106334.
- 29. Huang CY, Wen TH (2014), A Novel Private Attitude and Public Opinion Dynamics Model for Simulating Pluralistic Ignorance and Minority Influence, Journal of Artificial Societies and Social Simulation 17 (3):8
- 30. Huang CY, Wen TH (2014), Optimal Installation Locations for Automated External Defibrillators in Taipei 7-Eleven Stores: Using GIS and a Genetic Algorithm with a New Stirring Operator, Computational and Mathematical Methods in Medicine 2014:241435
- 31. Naim MR, Sahani M, Hod R, Hidayatulfathi O, Idrus S, Norzawati Y, Hazrin H, Tahir A, Wen TH, King CC, Zainudin MA (2014), Spatial-temporal Analysis for Identification of Vulnerability to Dengue in Seremban District, Malaysia, International Journal of *Geoinformatics* 10(1): 31-38.
- 32. Wen TH *, Jiang JA, Sun CH, Juang JY, Lin TS (2013), Monitoring Street-level Spatial-Temporal Variations of Carbon Monoxide (CO) in Urban Settings Using a Wireless Sensor Network (WSN) Framework, International Journal of Environmental Research and **Public Health** 10(12), 6380-639

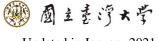


- 33. Huang CY, **Wen TH** *, Tsai YS (2013), FLUed: A Novel Four-Layer Model for Simulating Epidemic Dynamics and Assessing Intervention Policies, *Journal of Applied Mathematics*, 2013: 325816.
- 34. Hu MC, Huang AL, **Wen TH** * (2013), GIS-based Biomass Resource Utilization for Rice Straw Co-firing in the Taiwanese Power Market, *Energy* 55:354-360
- 35. Wu HH, Wang CY, Teng HJ, Lin C, Lu LC, Jian SW, Chang NT, **Wen TH**, Wu JW, Liu DP, Lin LJ, Norris DE, Wu HS (2013), A Dengue Vector Surveillance by Human Population-stratified Ovitrap Survey for *Aedes (Diptera: Culicidae)* Adult and Egg Collections in High Dengue-risk Areas of Taiwan, *Journal of Medical Entomology* 50(2):261-269
- 36. Huang CY, Lee CL, **Wen TH** *, Sun CT (2013), A Computer Virus Spreading Model Based on Resource Limitations and Interactions Costs, *Journal of Systems and Software* 86(3): 801-808.
- 37. Ng IC, **Wen TH** *, Wang JY, Fang CT * (2012) Spatial Dependency of Tuberculosis Incidence in Taiwan, *PLOS ONE* 7(11): e50740.
- 38. Tsai YS, Ko PC, Huang CY, **Wen TH** * (2012), Optimizing Locations for the Installation of Automated External Defibrillators (AEDs) in Urban Public Streets Through the Use of Spatial and Temporal Weighting Schemes, *Applied Geography* 35(1-2):394-404
- 39. **Wen TH** *, Lin MH, Fang CT (2012) Population Movement and Vector-borne Disease Transmission: Differentiating Spatial-temporal Diffusion Patterns of Commuting and Non-Commuting Dengue Cases. *Annals of the Association of American Geographers* 102(5): 1026-1037.
- 40. Lin CM, **Wen TH** * (2012), Temporal Changes in Geographical Disparities in Alcohol-attributed Disease Mortality before and after Implementation of the Alcohol Tax Policy in Taiwan, *BMC Public Health* 12:889.
- 41. Su MD, Lin MC, Lin CH, Wang SF, **Wen TH**, Hsieh HI (2012), A Spatial Aggregation Index for Effective Fallow Decision in Paddy Irrigation Demand Planning. *Paddy and Water Environment*, 10(1):31-39
- 42. Yang AC, **Wen TH** *, Shih CC, Fang CT * (2011) Differentiating Geographic Patterns of Human Immunodeficiency Virus Infection with Different Risk Factors in Northern Taiwan. *Applied Geography* 31(2): 519-524
- 43. Lin CH, **Wen TH** * (2011). Using Geographically Weighted Regression (GWR) to Explore Spatial Varying Relationships of Immature Mosquito and Human Densities with the Incidence of Dengue. *International Journal of Environmental Research and Public Health* 8(7): 2798-2815
- 44. Tsai YS, Huang CY, **Wen TH** *, Sun CT, Yen MY (2011). Integrating Epidemic Dynamics with Daily Commuting Networks: Building a Multilayer Framework to Assess Influenza A



Updated in January 2021

- (H1N1) Intervention Policies. *Simulation: Transactions of The Society for Modeling and Simulation International* 87(5): 385-405
- 45. Hu MC, Lin CH, Chou CA, Hsu SY, **Wen TH** * (2011). Analysis of Biomass Co-firing Systems in Taiwan Power Markets Using Linear Complementarily Models. *Energy Policy* 39(8): 4594-4600
- 46. Lin MH, Yang AC, **Wen TH** * (2011). Using Regional Differences and Demographic Characteristics to Evaluate the Principles of Estimation of the Residence of the Population in National Health Insurance Research Databases (NHIRD). *Taiwan Journal of Public Health* 30(4):347-360. (In Chinese) (selected as a Recommended Reading Article)
- 47. Chang YC, **Wen TH** *, Lai MS (2011) Comparisons of Different Geographical Accessibility Methods in Evaluating Township-level Physician-to-Population Ratios in Taiwan. *Taiwan Journal of Public Health* 30(6) 558-572 (in Chinese)
- 48. **Wen TH** (2011). Comments on "The Correlation between Availability of High-rise Buildings and Suicide by Jumping in Taiwan", *Taiwan Journal of Public Health* 30(6): 547. (in Chinese)
- 49. **Wen TH**, Chen DR, Tsai MJ (2010) Identifying Geographical Variations in Poverty-Obesity Relationships: Empirical Evidence from Taiwan. *Geospatial Health* 4(2): 257-265
- 50. **Wen TH**, Lin NH, Chao DY, Hwang KP, Kan CC, Lin KC, Wu JT, Huang SY, Fan IC, King CC (2010) Spatial-Temporal Patterns of Dengue in Areas at Risk of Dengue Hemorrhagic Fever in Kaohsiung, Taiwan. *International Journal of Infectious Diseases* 14:e334–e343
- 51. **Wen TH** *, Liu TC, Lin MH (2010), Crime Mapping and Hotspot Analysis: A Case Study of Residential Burglaries in Taipei City, 1998-2007. *Journal of Geographical Research* 52:43-63. (in Chinese)
- 52. Huang CY, Tsai YS, **Wen TH** * (2010) A Network-Based Simulation Architecture for Studying Epidemic Dynamics. *Simulation: Transactions of The Society for Modeling and Simulation International* 86: 351-368
- 53. Chen DR, **Wen TH** (2010), Elucidating the Changing Socio-Spatial Dynamics of Neighborhood Effects on Adult Obesity Risk in Taiwan from 2001 to 2005, *Health & Place* 16(6): 1248-1258.
- 54. Chen DR, **Wen TH** (2010) Socio-spatial Patterns of Neighborhood Effects on Adult Obesity in Taiwan: A Multilevel Model. *Social Science & Medicine* 70: 823–833.
- 55. Shang CS, Fang CT, Liu CM, **Wen TH**, Tsai KH, King CC (2010) The Role of Imported Cases and Favorable Meteorological Conditions in the Onset of Dengue Epidemics, *PLoS Neglected Tropical Diseases* 4(8): e775.
- 56. Huang CY, Tsai YS, **Wen TH** (2010), Simulations for Epidemiology and Public Health Education. *Journal of Simulation* 4:68-80

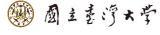


Updated in January 2021

- 57. Chang YC, **Wen TH** *, Lai MS (2009) Using Geographic Information Systems (GIS) to Identify the Association between Geographic Accessibility and Hospital-seeking Behavior by Hepatocellular Carcinoma Patients in Taiwan , *Taiwan Journal of Public Health* 28(6): 517-529. (in Chinese) (selected as a Recommended Reading Article)
- 58. Kan CC, Lee PF, and **Wen TH**, Chao DY, Wu MH, Lin NH, Huang YJ, Shang CS, Fan IC, Shu PY, Huang JH, King CC, Pai L. (2008) Two Clustering Diffusion Patterns Identified from the 2001-2003 Dengue Epidemic. *American Journal of Tropical Medicine & Hygiene* 79(3): 344–352.
- 59. Chen J, Chen DR, and **Wen TH** (2008) Delayed Treatment of Diagnosed Pulmonary Tuberculosis in Taiwan. *BMC Public Health* 8:236
- 60. **Wen TH**, Lin CH, Chen CT, and Su MD (2007) Analysis of Spatial Scenarios Aiding Decision-Making for Regional Irrigation Water-Demand Planning. *Journal of Irrigation and Drainage Engineering* 133(5): 455-467
- 61. **Wen TH**, Lin NH, Lin CH, King CC, Su MD (2006) Spatial Mapping of Temporal Risk Characteristics to Improve Environmental Health Risk Identification: a Case Study of a Dengue Epidemic in Taiwan. *Science of the Total Environment* 367: 631–640.
- 62. **Wen TH**, Su MD, Yeh YL (2004), A GIS-based Framework of Regional Irrigation Water Demand Assessment. *Paddy and Water Environment* 2:33-39.
- 63. **Wen TH**, Su YH, Su MD (2004), A Spatial Data Structure of Irrigation Canal Systems, *Journal of Chinese Agricultural Engineering* 50(3):19-31. (in Chinese)
- 64. **Wen TH**, King CC, Hsiao CK, et al (2002), Application of Geographic Information Systems (GIS) to Epidemiological surveillance, Data analysis and Effective Control in Infectious Diseases, *Taiwan Journal of Public Health* 21:449-456. (in Chinese)
- 65. **Wen TH**, Su MD, Lin CH, et al (1998), Application of Geographic Information on the Estimation of Regional Irrigation Water Demand, *Journal of Taiwan Water Conservancy* 46(3):12-23. (in Chinese)

(B). Book Chapters and Encyclopedia Entries

- 1. **Wen TH** *, Liao, HY, Yang KL, Chen TH (2021), Characterizing urban built environments prone to after-rain standing water: A multilevel image analysis, In Xiaojun Yang (Eds.), *Urban Remote Sensing: Monitoring, Synthesis and Modeling in the Urban Environment* (2nd Edition), Wiley-Blackwell.
- 2. **Wen TH** (2019), Spatial Assimilation, In Anthony M. Orum (Eds.), *Wiley-Blackwell Encyclopedia of Urban and Regional Studies*, Wiley-Blackwell.
- 3. **Wen TH**, Hsu CS, Sun CH, Jiang JA, Juang JY (2018), A Location-Based Client-Server Framework for Assessing Personal Exposure to the Transmission Risks of Contagious



Updated in January 2021

- Diseases, In Shaw SL and Sui D (Eds.). *Human Dynamics Research in Smart and Connected Communities*, Springer Series: GeoJournal Library, Springer
- 4. **Wen TH**, Chin WC, Lai PC (2017), Link Structure Analysis of Urban Street Networks for Delineating Traffic Impact Areas. Essaaidi and Nemiche (Eds.), *Advances in Complex Societal, Environmental and Engineered Systems*, Springer Series: Nonlinear Systems and Complexity, Springer
- 5. **Wen TH**, Lin MH, Li MH (2016), Potential Effects of Climate Changes on Dengue Transmission: A Review of Empirical Evidence from Taiwan, Rais Akhtar (eds), *Climate Change and Human Health Scenario in South and Southeast Asia*, Springer.
- 6. **Wen TH**, Tsai YS (2015), Analyzing the Patterns of Space-Time Distances for Tracking the Diffusion of an Epidemic, In *Space-Time Integration in Geography and GIScience*, edited by Kwan MP, Richardson D, Wang D and Zhou C. Dordrecht: Springer.
- 7. Su MD, Lin MC, **Wen TH** (2011), Spatial Mapping and Environmental Risk Identification, *Encyclopedia of Environmental Health*, Five-Volume Set, Elsevier
- 8. **Wen TH**, Chang YC, Lai MS (2010), Measurement of Geographic Accessibility for Cancer Hospitals in Taiwan, *Spatially Integrated Humanities and Social Sciences*, Beijing: Science Press. (ISBN: 978-7-03-026632-3)
- 9. **Wen TH**, Tsai YS, Huang CY, Yen MY (2009), Multi-Layer Epidemic Dynamics Simulation (MEDSIM) for Spatial Transmission of Acute Respiratory Diseases, *Intelligence and Security Informatics: Biosurveillance and Biosecurity*, New York: West Publishing Co. (ISBN: 978-1-60317-007-9)
- 10. King CC, Chao DY, **Wen TH**, Kao CL, Wu JT, Huang YJ, Tipayamongkholgul M, Shang CS. (2008) Epidemiologic Characteristics of Dengue in Taiwan and Implications for Global Control, *Dengue Disease*, Research Signpost, India: Kerala.
- 11. **Wen TH**, Lin NH, Lin K, Fan IC, Su MD, King CC (2007), A Spatial-Temporal Approach to Differentiate Epidemic Risk Patterns, In Lai, P.C. and Mak, S.H. (eds). *GIS for Health and the Environment: Development in the Asia Pacific Regions*. Berlin: Springer-Verlag.

(C). Textbooks and Atlas Books

- 1. **Wen TH** (2021), *Spatial Analysis: Methods and Applications* (2nd Edition), Taipei: Yeh Yeh Book Gallery, pp.344. (ISBN: 978-957-90-9696-6)
- 2. Wen TH (2015), *Spatial Analysis: Methods and Applications*, Taipei: Yeh Yeh Book Gallery, pp.285. (ISBN: 978-986-56-6821-1)
- 3. Wen TH, Huang CC, Yeh KH (2012), *Census Atlas of Taiwan (1956-2010)*, Taipei: NTU Center for Population and Gender Studies, pp.305. (ISBN: 978-986-03-5765-3)