Wei-Chiang Hong
(洪維強)

Dept. of Information Management, Asia Eastern University of Science and Technology, New Taipei, Taiwan (亞東科技大學資訊管理系)
Email: fi013@mail.aeust.edu.tw URL: https://samuelsonhong.mystrikingly.com/

Educations(學歷)

- 2008 **Ph.D.**, Management, Da Yeh University, Changhua, Taiwan **(大葉大學管理研究所管理學博士)**
- 1996 **M.S.**, Engineering, National Chiao Tung University, Hsinchu, Taiwan **(國立交通大學交通運輸研究所工學碩士)**
- 1994 **B.S.**, Science, Fu-Jen Catholic University, New Taipei, Taiwan **(輔仁大學數學系理學學士)**

Experiences(經歷)

- 2022-2023 **Honorary Chair Professor**, Department of Information Management, Asia Eastern University of Science and Technology, Taiwan **(亞東科技大學醫護暨管理學院資訊管理系榮譽講座教授)**
- 2021-2023 **Honorary Visiting Professor**, Department of Computer Science and Engineering, ABES (Academy of Business & Engineering Sciences) Engineering College, India (印度商業與工程科學研究院**(ABES)**工程學院計算機科學與工程學系榮譽客座教授)
- 2022-2023 **Jointly Appointed Professor**, Department of Information Management, Yuan Ze University, Taiwan (元智大學資訊學院資訊管理學系合聘教授)
- 2021- present **Head**, Department of Information Management, Asia Eastern University of Science and Technology, Taiwan **(亞東科技大學醫護暨管理學院資訊管理系系主任)**
- 2021- present **Professor**, Department of Information Management, Asia Eastern University of Science and Technology, Taiwan **(亞東科技大學醫護暨管理學院資訊管理系教授)**
- 2020- 2021 **Dean**, College of Healthcare & Management, Oriental Institute of Technology, Taiwan **(亞東技術學院醫護暨管理學群學群長)**
- 2019- 2021 **Head**, Department of Information Management, Oriental Institute of Technology, Taiwan **(亞東技術學院資訊管理系系主任)**
- 2013- 2021 **Professor**, Department of Information Management, Oriental Institute of Technology, Taiwan **(亞東技術學院資訊管理系教授)**
- 2010- 2013 **Associate Professor**, Department of Information Management, Oriental Institute of Technology, Taiwan **(亞東技術學院資訊管理系副教授)**
- 2007- 2010 **Assistant Professor**, Department of Information Management, Oriental Institute of Technology, Taiwan **(亞東技術學院資訊管理系助理教授)**
- 2021- present **Co-Editor-in-Chief (共同主編)**, ***Journal of Management Science & Engineering Research***

- 2021- present **Co-Editor-in-Chief (共同主編)**, ***Journal of Intelligent Learning Systems and Applications***
- 2012- present **Editor (編委)**, ***Applied Soft Computing*** (SCI, 2021 IF=8.263)
- 2018- present **Editor (編委)**, ***Computers & Industrial Engineering*** (SCI, 2021 IF=7.180)
- 2008- present **Editor (編委)**, ***Energy Sources, Part B: Economics, Planning, and Policy*** (SCI; 2021 IF=4.621)
- 2020- present **Editor (編委)**, ***Discover Internet of Things***
- 2021- present **Editor (編委)**, ***Journal of Artificial Intelligence & Data Mining***
- 2021- present **Editor (編委)**, ***Global Journal of Energy Technology Research Updates***
- 2017- present **Guest editor (客座編委)**,
  Computers & Industrial Engineering (SCI, 2021 IF=7.180),
  Sustainable Computing: Informatics & Systems (SCI, 2021 IF=4.923),
  Energies (SCI, 2021 IF=3.252),
  Sustainability (SSCI/SCI, 2021 IF=3.889),
  Multimedia Tools and Applications (SCI; 2021 IF=2.557),
  IET Communications (SCI; 2021 IF=1.345),
  Journal of Sensors (SCI; 2021 IF=2.336),
  International Journal of Distributed Sensor Networks (SCI, 2021 IF=1.938),
  Mathematical Problems in Engineering (SCI; 2021 IF=1.430),
  Computer Modeling in Engineering & Science (SCI; 2021 IF=2.027),
  Discover Internet of Things,
  Energy Engineering.
- 2020- present **Editor of book series** (**專書編委**), ***Advances in Computing Communications and Informatics*** (Bentham Science Publisher, ISSN: 1231-1231 (Online))
- 2020- present **Editor of proceeding series** (**學術會議論文集編委**),
  Atlantis Highlights in Computer Sciences (Atlantis Press, ISSN: 2589-4900 (Online)),
  Atlantis Highlights in Engineering (Atlantis Press, ISSN: 2589-4943 (Online)),
  Advances in Engineering Research (Atlantis Press, ISSN: 2352-5401 (Online))

Major Research Interests (主要研究興趣)

- Computational Intelligence **(計算智能)** (Neural Networks **(神經網路)**, Evolutionary Computation **(演化計算)**).
- Application of forecasting technology **(預測應用技術)** (ARIMA, Support vector regression **(支持向量回歸)**, Chaos theory **(混沌理論)**, Cloud theory **(雲理論)**, and Quantum theory **(量子理論)**).

Cooperation Projects (產學合作計畫)

- Evolutionary support vector regression for forecasting complex motion of floating platform (**基於演化支持向量海上浮式平台複雜運動預測應用**)
- Evolutionary support vector regression for forecasting chaotic motions of floating platform (**演**

化支持向量的海上浮式平台混沌運動預測應用)

Awards & Honors (獲獎與榮譽)

- **8** papers were list as Highly cited paper in ESI, Clarivate, 8 Sept. 2022.
  (8 篇論文被科睿唯安的基本科學指標評為工程類高被引論文)
- *h* index =**43**, total citation=**5,719,** Web of Science, 11 Sept. 2022.
  (Web of Science 的 *h* 指標=43；總引用數=5,719 次)
- **Honorary Chair Professor**, Department of Information Management, Asia Eastern University of Science and Technology, Taiwan, Aug. 2022.
  (亞東科技大學醫護暨管理學院資訊管理系榮譽講座教授)
- **World's Top 100 Thousands Scientists** (ranked 53,922nd among all fields, and 589th in Computer Sciences and Technology fields), GlobalAuthorID.com, 31 Aug. 2022.
  (**全球頂尖前 10 萬名科學家排名第 53,922 名，在「計算機科學與技術」領域第 589 名**)
- **2020-2021 Top Cited Article**, *Journal of Forecasting*, Wiley Publisher, Apr. 2022.
  (*Journal of Forecasting* 2020-2021 年度高被引論文。獲獎論文名稱為 A generalized regression model based on hybrid empirical mode decomposition and support vector regression with back propagation neural network for mid-short term load forecasting [基於混合經驗解析模式、支持向量回歸與倒傳遞神經網路的一般化回歸模型於中短期電力負載預測])
- Pingdingshan Natural Science Outstanding Academic Paper (First Prize), Pingdingshan Department of Human Resources and Social Security, 1 Jan. 2022.
  (河南省平頂山市自然科學學術獎——平頂山市自然科學優秀學術論文一等獎。獲獎論文名稱為 Hybridizing DEMD and quantum PSO with SVR in electric load forecasting [混合差分經驗解析模式(DEMD)方法和量子粒子群優化算法(QPSO)的支持向量回歸模型於電力負載預測])
- Henan Province Natural Science Outstanding Academic Paper (First Prize), Henan Provincial Department of Human Resources and Social Security, 31 Dec. 2021.
  (河南省第五屆自然科學學術獎——河南省自然科學優秀學術論文一等獎。獲獎論文名稱為 Short term load forecasting based on phase space reconstruction algorithm and bi-square kernel regression model [基於相空間重構算法和雙平方核回歸模型的短期電力負載預測])
- **World's Top 2% Scientists 2021** (ranked 33,217th for career-long impact, and 562nd in Artificial Intelligence & Image Processing fields), Stanford University, 26 Oct. 2021.
  (**2021 全球前 2%頂尖科學家，終身影響力位列第 33,217 名，在「人工智慧與圖像處理」子領域位居第 562 名**)
- **Honorary Visiting Professor**, Department of Computer Science and Engineering, ABES Engineering College (India), Mar. 2021.
  (印度 ABES 工程學院榮譽客座教授)
- **2018 Highly Cited Research Paper**, *Applied Energy*, Elsevier Publisher, Oct. 2020.

(*Applied Energy* 2018 年度高被引論文)

- ❖ **Global Peer Review Awards in Computer Science, Engineering, and Cross-Field**, Publons, Clarivate, Sept. 2019.
  (《全球同儕評閱獎》計算機科學、工程學及跨領域)
- ❖ **International Advisory Committee**, Amity University (India), Jul. 2020.
  (印度 **Amity** 大學國際諮詢委員)
- ❖ **Jiangsu Distinguished Professor**, Department of Education, Jiangsu, 30 Jun. 2017.
  (获选江苏省教育厅江苏特聘教授)
- ❖ **Min-Jiang Scholar Distinguished Professor**, Department of Education, Fujian, 15 Nov. 2017.
  (获选福建省教育厅闽江学者特聘教授)
- ❖ **Best Reviewer of *Applied Energy* in 2016**, Elsevier Publisher, Aug. 2017.
  (*Applied Energy* 最佳評審員)
- ❖ **Top 10 Best Reviewers of *Applied Energy* in 2014**, Elsevier Publisher, Mar. 2015.
  (*Applied Energy* 最佳評審員)
- ❖ **Outstanding Professor Award**, Far Eastern Y. Z. Hsu Science and Technology Memorial Foundation (Taiwan), Nov. 2014.
  (財團法人徐有庠先生紀念基金會有庠傑出教授獎)
- ❖ **Taiwan Inaugural Scopus Young Researcher Award—Computer Science (2nd Runner up)**, Elsevier Publisher (Taiwan), Nov. 2014.
  (台灣第一屆 Scopus 青年科學家獎—資訊科學領域(第三名))
- ❖ **Top Cited Paper Award 2007-2011**, Elsevier Publisher (The Netherlands), Jun. 2012.
  (2007-2011 年高引論文獎)

Publications(學術出版)

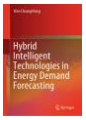
- ➢ **Books and Edited Books (寫作專書與編輯專書)**

2020

1 
Singh, P.K., Sood, S., Kumar, Y., Paprzycki, M., Pljonkin, A., and **Hong, Wei-Chiang** (Eds.), *Futuristic Trends in Networks and Computing Technologies*, Springer, Singapore, April 2020. (ISBN: 978-981-15-4450-7).

2 
Hong, Wei-Chiang* (Ed.), *Intelligent Optimization Modelling in Energy Forecasting*, MDPI Publisher, Switzerland, March 2020. (ISBN 978-3-03928-364-4).

3 
Singh, P.K., Bhargava, B.K., Paprzycki, M., Kaushal, N.C., and **Hong, Wei-Chiang** (Eds.), *Handbook of Wireless Sensor Networks: Issues and Challenges in Current Scenario's*, Springer, Switzerland, February 2020. (ISBN: 978-3-030-40305-8).

4 
Hong, Wei-Chiang*, *Hybrid Intelligent Technologies in Energy Demand Forecasting*, Springer, Switzerland, January 2020. (ISBN: 978-3-030-36528-8). **科技部學術專書寫作計畫補助 (MOST 108-2410-H-161-004)**

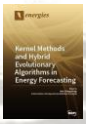
2019

5  Li, M.-W., **Hong, Wei-Chiang***, Geng, J., and Geng, H.-S., *Intelligent Prediction Methods and Their Applications in Energy Fields*, Harbin Engineering University Press, Harbin, China, June 2019. (ISBN: 978-7-5661-2150-9) (in Simplified Chinese)

6  **Hong, Wei-Chiang***, Li, M.-W., and Fan, G.-F. (Eds.), *Short-Term Load Forecasting by Artificial Intelligent Technologies*, MDPI Publisher, Switzerland, January 2019. (ISBN 978-3-03897-582-3).

2018

7  **Hong, Wei-Chiang*** (Ed.), *Hybrid Advanced Optimization Methods with Evolutionary Computation Techniques in Energy Forecasting*, MDPI Publisher, Switzerland, October 2018. (ISBN 978-3-03897-286-0).

8  **Hong, Wei-Chiang*** (Ed.), *Kernel Methods and Hybrid Evolutionary Algorithms in Energy Forecasting*, MDPI Publisher, Switzerland, October 2018. (ISBN 978-3-03897-292-1).

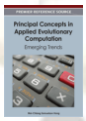
9  **Hong, Wei-Chiang*** (Ed.), *Hybrid Advanced Techniques for Forecasting in Energy Sector*, MDPI Publisher, Switzerland, October 2018. (ISBN 978-3-03897-290-7).

2013

10  **Hong, Wei-Chiang***, *Intelligent Energy Demand Forecasting*, Springer, London, UK, April 2013. (ISBN: 978-1-44714-967-5). **科技部學術專書寫作計畫補助(NSC 101-2410-H-161-001)**

11  **Hong, Wei-Chiang*** (Ed.), *Modeling Applications and Theoretical Innovations in Interdisciplinary Evolutionary Computation*, IGI Publisher, March 2013. (ISBN: 978-1-46663-628-6).

2012

12  **Hong, Wei-Chiang*** (Ed.), *Principal Concepts in Applied Evolutionary Computation: Emerging Trends*, IGI Publisher, June 2012. (ISBN: 978-1-46661-749-0)

2008

13  **Hong, Wei-Chiang***, *Competitiveness in the Tourism Sector: A Comprehensive Approach from Economic and Management Points*, Physica-Verlag, A Springer-Verlag Company, Heidelberg, Germany, May 2008. (ISBN: 978-3-79082-041-6).

➢ **Refereed Papers (期刊論文)** (*: Corresponding author 通訊作者)

[Total cited numbers: 5,719, based on Web of Science, *h* Index=43; Clarivate ESI highly cited papers: 8]

In press

1. Singh, P.K., Bhargava, B., **Hong, Wei-Chiang**, and Angin, P. "1174: futuristic trends and innovations in multimedia systems using big data, IoT and cloud technology (FTIMS)," *Multimedia Tools and Applications*.
2. Fan, G.-F., Peng, L.-L., and **Hong, Wei-Chiang***"Short term load forecasting based on empirical wavelet transform and random forest," *Electrical Engineering*. **SCI 2021 IF=1.630**

2023

3. **Hong, Wei-Chiang***, and Liang, Y. "Introduction to the Special Issue on Hybrid intelligent methods for forecasting in resources and energy field," *Computer Modeling in Engineering and Sciences*, 134(2) Pages 763-766, February 2023. **SCI 2021 IF=2.027**

2022

4. Fan, G.-F., Jin, X.-R., and **Hong, Wei-Chiang*** "Application of COEMD-S-SVR model in tourism demand forecasting and economic behavior analysis: The case of Sanya City," *Journal of the Operational Research Society*, 73 (7) Pages 1474-1486, July 2022. **SSCI/SCI 2021 IF=3.051**
5. Fan, G.-F., Wei, H.-Z., Chen, M.-Y., and **Hong, Wei-Chiang***"Photovoltaic power generation forecasting based on the ARIMA-BPNN-SVR model," *Global Journal of Energy Technology Research Updates*, 9, 18-38, July 2022.
6. Fan, G.-F., Zhang, L.-Z., Yu, M., **Hong, Wei-Chiang***, and Dong, S.-Q. "Applications of random forest in multivariable response surface for short-term load forecasting," *International Journal of Electrical Power & Energy Systems*, 139, 108073, July 2022. **SCI 2021 IF=5.659**
7. Tanwar, S., Parmar, A., Kumari, A., Jadav, N. K., **Hong, Wei-Chiang***, Sharma, R. "Blockchain for food industry: opportunities and challenges," *Sustainability*, 14(6), 7036, June 2022. **SSCI/SCI 2021 IF=3.889**
8. Mankodiya, H., Jadav, D., Gupta, R., Tanwar, S., **Hong, Wei-Chiang***, Sharma, R. "OD-XAI: Explainable AI-based semantic object detection for autonomous vehicles in industry 5.0," *Applied Sciences*, 12(11) 5310, May 2022. **SCI 2021 IF=2.838**
9. Cao, X., Yang, Z.-Y., **Hong, Wei-Chiang***, Xu, R.-Z., and Wang, Y.-T. "Optimizing berth-quay crane allocation considering economic factors using chaotic quantum SSA," *Applied Artificial Intelligence*, 36(1) 2073719, May 2022. **SCI 2021 IF=2.777**
10. GM, H., Shau, A., Gourisaria, M. K., Singh, P. K., **Hong, Wei-Chiang***, Singh, V., and Balabantaray, B. K. "On the dynamics and feasibility of transferred inference for diagnosis of invasive carcinoma: A perspective," *IEEE Access*, 10 Pages 30870-30889, March 2022. **SCI 2021 IF=3.476**
11. Rohera, D., Shethna, H., Patel, K., Thakker, U., Tanwar, S., Gupta, R., **Hong, Wei-Chiang***, and Sharma, R. "A taxonomy of fake news classification techniques: Survey and implementation aspects," *IEEE Access*, 10 Pages 30367-30394, March 2022. **SCI 2021 IF=3.476**
12. Sharma, R., Siarry, P., Xin, Q., and **Hong, Wei-Chiang** "Deep learning-based intelligent communication systems: Using big data analytics," *IET Communications*, 16(5) Pages 379-383, March 2022. **SCI 2021 IF=1.345**
13. Patel, R. K., Kumari, A., Tanwar, S., **Hong, Wei-Chiang***, and Sharma, R. "AI-empowered recommender system for renewable energy harvesting in smart grid system," *IEEE Access*, 10(3) Pages 24316-24326, March 2022. **SCI 2021 IF=3.476**
14. **Hong, Wei-Chiang***"Optimization by hybrid/combined artificial intelligent models," *Journal of Management Science & Engineering Research*, 5(1) Pages 27-29, March 2022.
15. Li, M.-W., Xu, D.-Y., Geng, J., and **Hong, Wei-Chiang***"A ship motion forecasting approach based on empirical mode decomposition method hybrid deep learning network and quantum

butterfly optimization algorithm," *Nonlinear Dynamics*, 71(3) Pages 2447-2467, February 2022. **SCI 2021 IF=5.741**

16. Shah, I., Doshi, C., Patel, M., Tanwar, S.*, **Hong, Wei-Chiang***, and Sharma, R. "Effects of pandemic outbreak on human lives: A comprehensive review," *Medicina*, 58 (2), 311, February 2022. **SCI 2021 IF=2.948**
17. Verma, P., Tiwari, R., **Hong, Wei-Chiang***, Upadhyay, S., and Yeh, Y.-H. "FETCH: A deep learning-based fog computing and IoT integrated environment for healthcare monitoring and diagnosis," *IEEE Access* 10(1) Pages 12548-12563, January 2022. **SCI 2021 IF=3.476**
18. Li, M.-W., Xu, D.-Y., Geng, J., and **Hong, Wei-Chiang*** "A hybrid approach for forecasting ship motion using CNN-GRU-AM and GCWOA," *Applied Soft Computing*, 114, 108084, January 2022. **SCI 2021 IF=8.263**
19. Liang, Y., Wang, H., and **Hong, Wei-Chiang** "Sustainability evaluation of modern photovoltaic agriculture based on interval type-2 fuzzy AHP TOPSIS and least square support vector machine optimized by fireworks algorithm," *Energy Engineering*, 119(1) pages 163-188, January 2022.
20. Peng, L.-L., Dong, S.-Q., Yu, M., Fan, G-F., and **Hong, Wei-Chiang** "Application of support vector regression and time series method in short term power load forecasting with regional difference," *The Chinese Journal of Artificial Intelligence*, 1(1), e190721194078, January 2022.

2021

21. Peng, L.-L., Fan, G.-F., Meng, Y., Chang, Y.-C., and **Hong, Wei-Chiang*** "Electric load forecasting based on wavelet transform and random forest," *Advanced Theory and Simulations*, 4(12), 2100334, December 2021. **SCI 2021 IF=4.105**
22. **Hong, Wei-Chiang***, Niu, D., Xu, Y., Zhang, M., and Singh, P. K. "Advanced intelligent technologies in energy forecasting and economical applications," *Mathematical Problems in Engineering*, 2021, Article ID 9865857, 2 pages, December 2021. **SCI 2021 IF=1.430**
23. Fan, G.-F., Yu, M., Dong, S.-Q., Yeh, Y.-H., and **Hong, Wei-Chiang*** "Forecasting short-term electricity load using hybrid support vector regression with grey catastrophe and random forest modeling," *Utilities Policy*, 73, 101294, December 2021. **SSCI/SCI 2021 IF=3.247**
24. Kumar, S., Tiwari, R., and **Hong, Wei-Chiang*** "QoS improvement using in-network caching based on clustering and popularity heuristics in CNN," *Sensors*, 21(21), 7204, November 2021. **SCI 2021 IF=3.847**
25. Sharma, A., Singh, P.K., **Hong, Wei-Chiang**, Dhiman, G., and Slowik, A. "Introduction to the Special Issue on Artificial Intelligence for Smart Cities and Industries," *Scalable Computing: Practice and Experience*, 22(2) Pages 89-91, November 2021.
26. Singh, P.K., Raut, R., **Hong, Wei-Chiang** , and Govindarajan, U.H. "Futuristic technologies for intelligent manufacturing and supply chain management," *IET Collaborative Intelligent Manufacturing*, 3(3), 12039, September 2021.
27. Zhang, Z.-C., and **Hong, Wei-Chiang*** "Application of variational mode decomposition and chaotic grey wolf optimizer with support vector regression for forecasting electric loads," *Knowledge-Based Systems*, 228, 107297, September 2021. **SCI 2021 IF=8.139; Cited by 1**

28. Yan, L., and **Hong, Wei-Chiang** "Evaluation and forecasting of wind energy investment risk along the belt and road based on a novel hybrid intelligent model," *Computer Modeling in Engineering and Sciences*, 128(3) Pages 1069-1102, August 2021. **SCI 2021 IF=2.027**
29. Zhao, H., Xu, Y., **Hong, Wei-Chiang**, Liang, Y., and Zou, D. "Smart evaluation of green campus sustainability considering energy utilization," *Sustainability*, 13(14), 7653, July 2021. **SSCI/SCI 2021 IF=3.889**
30. Liang, Y., Wang, H.*, and **Hong, Wei-Chiang** "Sustainable development evaluation of innovation and entrepreneurship education of clean energy major in colleges and universities based on SPA-VFS and GRNN optimized by chaos bat algorithm," *Sustainability*, 13(11), 5960, May 2021. **SSCI/SCI 2021 IF=3.889; Cited by 1**
31. Malhotra, P., Singh, Y., Anand, P., Bangotra, D.K., Singh, P.K., **Hong, Wei-Chiang*** "Internet of things: Evolution, concerns and security challenges," *Sensors*, 21(5), 1809, March 2021. **SCI 2021 IF=3.847; Cited by 8**
32. Li, M.-W., Wang, Y.-T., Geng, J., **Hong, Wei-Chiang*** "Chaos cloud quantum bat hybrid optimization algorithm," *Nonlinear Dynamics*, 103(1) Pages 1167-1193, January 2021. **SCI 2021 IF=5.741; Cited by 24**

2020

33. Fan, G.-F., Xiao, W., Li, Y.-T., and **Hong, Wei-Chiang*** "Forecasting electricity consumption using a novel hybrid model," *Sustainable Cities and Society*, 61, 102320, October 2020. **SSCI/SCI 2021 IF=10.696; Cited by 23**
34. Hou, M.*, Chiang, W.K*, **Hong, Wei-Chiang**, Yang, M., and Yu, W. "Application of dual modality contrast agent combined with multi-scale representation in ultrasound-magnetic resonance imaging registration scheme," *Molecular & Cellular Biomechanics*, 17(4), 165–178, October 2020. **SCI 2021 IF=0.500**
35. Fan, G.-F., Guo, Y.-H., Zheng, J.-M., and **Hong, Wei-Chiang***"A generalized regression model based on hybrid empirical mode decomposition and support vector regression with back propagation neural network for mid-short-term load forecasting," *Journal of Forecasting*, 39(5) Pages 737-756, August 2020. **SSCI 2021 IF=2.627; Cited by 18**
36. Fan, G.-F., Peng, L.-L., **Hong, Wei-Chiang***, and Wang, H. "Applications of statistical process control on Heating system optimization in billet heating furnace," *Control Engineering of China*, 27(8) Pages 1468-1473, August 2020.
37. Fan, G.-F., Xiao, W., Li, Y.-T., and **Hong, Wei-Chiang***"Fault detection in switching process of a substation using the SARIMA-SPC model," *Scientific Reports*, 10, 11417, July 2020. **SCI 2021 IF=4.996**
38. Bangotra, D.K., Singh, Y., Selwal, A., Kumar, N., Singh, P.K., and **Hong, Wei-Chiang***"An intelligent opportunistic routing algorithm for wireless sensor networks and its application towards the e-healthcare," *Sensors*, 20(14), 3887, July 2020. **SCI 2021 IF=3.847; Cited by 9**

39. Marques, G., Saini, J., Dutta, M., Singh, P.K., and **Hong, Wei-Chiang*** "Indoor air quality monitoring systems for enhanced living environments: A review toward sustainable smart cities," *Sustainability*, 12(10), 4024, May 2020. **SSCI/SCI 2021 IF=3.889; Cited by 14**
40. Singh, P.K., Bhargava, B., Hsuing, P.-A., and **Hong, Wei-Chiang** "Special issue on networking technologies for sustainable computing," *Sustainable Computing: Informatics & Systems*, 25, 100371, March 2020. **SCI 2021 IF=4.923**
41. Bodkhe, U., Mehta, D., Tanwar, S., Bhattacharya, P., Singh, P. K., and **Hong, Wei-Chiang*** "A survey on decentralized consensus mechanisms for cyber physical systems," *IEEE Access*, 8(1) Pages 54371-54401, March 2020. **SCI 2021 IF=3.476; Cited by 34**
42. Zhang, Z.-C., **Hong, Wei-Chiang***, and Li, J. "Electric load forecasting by hybrid self-recurrent support vector regression model with variational mode decomposition and improved cuckoo search algorithm," *IEEE Access*, 8(1) Pages 14642-14658, January 2020. **SCI 2021 IF=3.476; Cited by 57**
43. Tanwar, S., Bhatial, Q., Patel, P., Kumari, A., Singh, P. K., and **Hong, Wei-Chiang*** "Machine learning adoption in blockchain-based smart applications: The challenges, and a way forward," *IEEE Access*, 8(1) Pages 474-488, January 2020. **SCI 2021 IF=3.476; Cited by 76**

2019

44. Zhou, Y., Zhou, M., Xia, Q., and **Hong, Wei-Chiang** "Construction of EMD-SVR-QGA model for electricity consumption: Case of university dormitory," *Mathematics*, 7(12), 1188, December 2019. **SCI 2021 IF=2.592; Cited by 3**
45. Fan, G.-F., Peng, L.-L., and **Hong, Wei-Chiang*** "A new analytical method for reduction process of iron ore based on the power spectrum," *Iranian Journal of Science and Technology Transaction A: Science*, 43(6) Pages 2815-2829, December 2019. **SCI 2021 IF=1.553**
46. Zhang, Z.-C., and **Hong, Wei-Chiang*** "Electric load forecasting by complete ensemble empirical model decomposition adaptive noise and support vector regression with quantum-based dragonfly algorithm," *Nonlinear Dynamics*, 98(2) Pages 1107-1136, October 2019. **SCI 2021 IF=5.741; Cited by 99**
47. Li, M.-W., Geng, J., **Hong, Wei-Chiang***, and Zhang, L.-D. "Periodogram estimation based on LSSVR-CCPSO compensation for forecasting ship motion," *Nonlinear Dynamics*, 97(4) Pages 2579-2594, September 2019. **SCI 2021 IF=5.741; Cited by 35**
48. **Hong, Wei-Chiang**, Li, M.-W., Geng, J., and Zhang, Y. "Novel chaotic bat algorithm for forecasting complex motion of floating platforms," *Applied Mathematical Modelling*, 72 Pages 425-443, August 2019. **SCI 2021 IF=5.336; Cited by 81**
49. **Hong, Wei-Chiang***, and Fan, G.-F. "Hybrid empirical mode decomposition with support vector regression model for short term load forecasting," *Energies*, 12(6), 1093, March 2019. **SCI 2021 IF=3.252; Cited by 29**
50. Fan, G.-F., Dong, H.-J., Song, J.-Y., and **Hong, Wei-Chiang*** "Study on teaching reform based on abilities training for practice and innovation — Case of the course of Quality Engineering and

Management," *Journal of Educational Institute of Jilin Province*, 35(3) Pages 132-135, March 2019.

51. Fan, G.-F., Guo, Y.-H., Zheng, J.-M., and **Hong, Wei-Chiang*** "Application of the weighted k-nearest neighbor algorithm for short-term load forecasting," *Energies*, 12(5), 916, March 2019. **SCI 2021 IF=3.252; Cited by 39**
52. Liang, Y., Niu, D., and **Hong, Wei-Chiang** "Short term load forecasting based on feature extraction and improved general regression neural network model," *Energy*, 166 Pages 653-663, January 2019. **SCI 2021 IF=8.857; Cited by 106**

2018

53. Fan, G.-F., Peng, L.-L., **Hong, Wei-Chiang***, and Liao, Y.-S. "Applications of the grey-degree-based factor analysis on cloud image to improve the accuracy of weather recognition," *Iranian Journal of Science and Technology Transaction A: Science*, 42(4) Pages 2117-2129, December 2018. **SCI 2021 IF=1.553**
54. Li, M.-W., Geng, J., **Hong, Wei-Chiang***, and Zhang, Y. "Hybridizing chaotic and quantum mechanisms and fruit fly optimization algorithm with least squares support vector regression model in electric load forecasting," *Energies*, 11(9), 2226, September 2018. **SCI 2021 IF=3.252; Cited by 12**
55. Fan, G.-F., Peng, L.-L., and **Hong, Wei-Chiang***"Short term load forecasting based on phase space reconstruction algorithm and bi-square kernel regression model," *Applied Energy*, 224 Pages 13-33, August 2018. **SCI 2021 IF=11.446; Cited by 108**
56. Fan, G.-F., Wang, A., and **Hong, Wei-Chiang***"Combining grey model and self-adapting intelligent grey model with genetic algorithm and annual share changes in natural gas demand forecasting," *Energies*, 11(7), 1625, July 2018. **SCI 2021 IF=3.252; Cited by 18**
57. Dong, Y., Zhang, Z., and **Hong, Wei-Chiang***"A hybrid seasonal mechanism with a chaotic cuckoo search algorithm with a support vector regression model for electric load forecasting," *Energies*, 11(4), 1009, April 2018. **SCI 2021 IF=3.252; Cited by 87**

2017

58. Li, M.-W., Geng, J., Wang, S., and **Hong, Wei-Chiang***"Hybrid chaotic quantum bat algorithm with SVR in electric load forecasting," *Energies*, 10(12), 2180, December 2017. **SCI 2021 IF=3.252; Cited by 17**
59. Li, M.-W., Geng, J., **Hong, Wei-Chiang***, and Chen, Z.-Y. "A novel approach based on the Gauss-*v*SVR with a new hybrid evolutionary algorithm and input vector decision method for port throughput forecasting," *Neural Computing and Applications*, 28 (Suppl 1) Pages S621-S640, December 2017. **SCI 2021 IF=5.102; Cited by 8**
60. Niu, D., Liang, Y., and **Hong, Wei-Chiang** "Wind speed forecasting based on EMD and GRNN optimized by FOA," *Energies*, 10(12), 2001, December 2017. **SCI 2021 IF=3.252; Cited by 26**
61. Li, M.-W., **Hong, Wei-Chiang***, Geng, J., and Wang, J. "Berth and quay crane coordinated scheduling using chaos cloud particle swarm optimization algorithm," *Neural Computing and Applications*, 28(11) Pages 3163-3182, November 2017. **SCI 2021 IF=5.102; Cited by 29**

62. Fan, G.-F., Peng, L.-L., Zhao, X., and **Hong, Wei-Chiang*** "Applications of hybrid EMD with PSO and GA for an SVR-based load forecasting model," *Energies*, 10(11), 1713, October 2017. **SCI 2021 IF=3.252; Cited by 30**
63. Niu, D., Liang, Y., Wang, H., Wang, M., and **Hong, Wei-Chiang** "Icing forecasting of transmission line with modified BPNN-SVM-KELM based on the weight determination method of variance-covariance," *Energies*, 10(8), 1196, August 2017. **SCI 2021 IF=3.252; Cited by 13**

2016

64. Liang, Y., Niu, D., Cao, Y., and **Hong, Wei-Chiang** "Analysis and modeling for China's electricity demand forecasting using a hybrid method based on MR and ELM: A view from carbon emission," *Energies*, 9(11), 941, November 2016. **SCI 2021 IF=3.252; Cited by 15**.
65. Liang, Y., Niu, D., Ye, M., and **Hong, Wei-Chiang** "Short-term load forecasting based on wavelet transform and least square support vector machine optimized by improved cuckoo search," *Energies*, 9(10), 827, October 2016. **SCI 2021 IF=3.252; Cited by 23**
66. Umbarkar, A. J., Joshi, M. S., and **Hong, Wei-Chiang** "Comparative study of diversity based parallel dual population genetic algorithm for unconstrained function optimizations," *International Journal of Bio-Inspired Computation*, 8(4) Pages 248-263, August 2016. **SCI 2021 IF=3.295; Cited by 5**
67. Peng, L.-L., Fan, G.-F., Huang, M.-L., and **Hong, Wei-Chiang*** "Hybridizing DEMD and quantum PSO with SVR in electric load forecasting," *Energies*, 9(3), 221, March 2016. **SCI 2021 IF=3.252; Cited by 22**
68. Chen, Y.-H., **Hong, Wei-Chiang***, Shen, W., and Huang, N.-N. "Electric load forecasting based on LSSVM with fuzzy time series and global harmony search algorithm," *Energies*, 9(2), 70, January 2016. **SCI 2021 IF=3.252; Cited by 61**
69. Fan, G., Peng, L.-L., **Hong, Wei-Chiang***, and Sun, F. "Electric load forecasting by the SVR model with differential empirical mode decomposition and auto regression," *Neurocomputing*, 173(Part 3) Pages 958-970, January 2016. **SCI 2021 IF=5.779; Cited by 146**

2015

70. Dong, Y., Chen, X., Li, C.-C., **Hong, Wei-Chiang**, and Xu, Y. "Consistency issues of interval comparison matrices," *Soft Computing*, 19(8) Pages 2321-2335, August 2015. **SCI 2021 IF=3.732; Cited by 32**
71. Geng, J., Huang, M.-L., Li, M.-W., and **Hong, Wei-Chiang*** "Hybridization of seasonal chaotic cloud simulated annealing algorithm in a SVR-based load forecasting model," *Neurocomputing*, 151(Part 3) Pages 1362-1373, March 2015. **SCI 2021 IF=5.779; Cited by 52**
72. Chen, R., Liang, C.-Y., **Hong, Wei-Chiang**, and Gu, D.-X. "Forecasting holiday daily tourist flow based on seasonal support vector regression with adaptive genetic algorithm," *Applied Soft Computing*, 26 Pages 435-443, January 2015. **SCI 2021 IF=8.263; Cited by 117**

2014

73. Umbarkar, A.J., Joshi, M.S., and **Hong, Wei-Chiang** "Multithreaded Parallel Dual Population Genetic Algorithm (MPDPGA) for unconstrained function optimizations on multi-core system,"

Applied Mathematics and Computation, 243 Pages 936-949, September 2014. **SCI 2021 IF=4.397; Cited by 16**

74. Pandi, V.R., Panigrahi, B.K., **Hong, Wei-Chiang**, and Sharma, R. "A multiobjective bacterial foraging algorithm to solve the environmental economic dispatch problem," *Energy Sources, Part B: Economics, Planning, and Policy*, 9(3) Pages 236-247, September 2014. **SCI 2021 IF=4.621; Cited by 14**
75. Zheng, F., Zhang, E., Xu, Y., and **Hong, Wei-Chiang** "Competitive analysis for make-to-order scheduling with reliable lead time quotation," *Journal of Combinatorial Optimization*, 27(1) Pages 182-198, January 2014. **SCI 2021 IF=1.262; Cited by 1**

2013

76. Dong, Y., Zhang, G., **Hong, Wei-Chiang**, and Yu, S. "Linguistic computational model based on 2-tuples and intervals," *IEEE Transactions on Fuzzy Systems*, 21(6) Pages 1006-1018, December 2013. **SCI 2021 IF=12.253; Cited by 140**
77. Ju, F.-Y., and **Hong, Wei-Chiang*** "Application of seasonal SVR with chaotic gravitational search algorithm in electricity forecasting," *Applied Mathematical Modelling*, 37(23) Pages 9643-9651, December 2013. **SCI 2021 IF=5.336; Cited by 71**
78. Dong, Y., **Hong, Wei-Chiang**, and Xu, Y. "Measuring consistency of linguistic preference relations: A 2-tuple linguistic approach," *Soft Computing*, 17(11) Pages 2117-2130, November 2013. **SCI 2021 IF=3.732; Cited by 37**
79. Dong, Y., **Hong, Wei-Chiang**, Xu, Y., and Yu, S. "Numerical scales generated individually for analytic hierarchy process," *European Journal of Operational Research*, 229(3) Pages 654-662, September 2013. **SCI 2021 IF=6.363; Cited by 38**
80. Li, M., Kang, H., Zhou, P., and **Hong, Wei-Chiang** "Hybrid optimization algorithm based on chaos, cloud and particle swarm optimization algorithm," *Journal of Systems Engineering and Electronics*, 24(2) Pages 324-334, April 2013. **SCI 2021 IF=1.363; Cited by 26**
81. Fan, G., Wang, H., Qing, S., **Hong, Wei-Chiang**, and Li, H.-J. "Support vector regression model based on empirical mode decomposition and auto regression for electric load forecasting," *Energies*, 6(4) Pages 1887-1901, April 2013. **SCI 2021 IF=3.252; Cited by 75**
82. Li, M., **Hong, Wei-Chiang***, and Kang, H. "Urban traffic flow forecasting using Gauss-SVR with cat mapping, cloud model and PSO hybrid algorithm," *Neurocomputing*, 99 Pages 230-240, January 2013. **SCI 2021 IF=5.779; Cited by 71**
83. **Hong, Wei-Chiang***, Dong, Y., Zhang, W. Y., Chen, L.-Y. and Panigrahi, B.K. "Cyclic electric load forecasting by seasonal SVR with chaotic genetic algorithm," *International Journal of Electrical Power & Energy Systems*, 44(1) Pages 604-614, January 2013. **SCI 2021 IF=5.659; Cited by 152**

2012

84. Zhang W. Y., **Hong, Wei-Chiang***, Dong, Y., Tsai, G., Sung, J.-T., and Fan, G. "Application of SVR with chaotic GASA algorithm in cyclic electric load forecasting," *Energy*, 45(1) Pages 850-858, September 2012. **SCI 2021 IF=8.857; Cited by 52**

85. Fan, G., Qing, S., Wang, H., Shi, Z., **Hong, Wei-Chiang**, and Dai, L. "Study on apparent kinetic prediction model of the smelting reduction based on the time series," *Mathematical Problems in Engineering*, 2012 Article ID 720849, 15 pages, June 2012. **SCI 2021 IF=1.430; Cited by 8**
86. **Hong, Wei-Chiang***"Application of seasonal SVR with chaotic immune algorithm in traffic flow forecasting," *Neural Computing and Applications*, 21(3) Pages 583-593, April 2012. **SCI 2021 IF=5.102; Cited by 57**

2011

87. **Hong, Wei-Chiang***"Electric load forecasting by seasonal recurrent SVR with chaotic artificial bee colony algorithm," *Energy*, 36(9) Pages 5568-5578, September 2011. **SCI 2021 IF=8.857; Cited by 203**
88. **Hong, Wei-Chiang***"Traffic flow forecasting by seasonal SVR with chaotic simulated annealing algorithm," *Neurocomputing*, 74(12-13) Pages 2096-2107, June 2011. **SCI 2021 IF=5.779; Cited by 150**
89. **Hong, Wei-Chiang***, Dong, Y., Lai, C.-Y., Chen, L.-Y., Wei, S.-Y. "SVR with hybrid chaotic immune algorithm for seasonal load demand forecasting," *Energies*, 4(6) Pages 960-977, June 2011. **SCI 2021 IF=3.252; Cited by 48**
90. **Hong, Wei-Chiang***, Dong, Y., Zheng, F., and Wei, S.-Y. "Hybrid evolutionary algorithms in a SVR traffic flow forecasting model," *Applied Mathematics and Computation*, 217(15) Pages 6733-6747, April 2011. **SCI 2021 IF=4.397; Cited by 65**
91. **Hong, Wei-Chiang***, Dong, Y., Chen, L.-Y., and Wei, S.-Y. "SVR with hybrid chaotic genetic algorithms for tourism demand forecasting," *Applied Soft Computing*, 11(2) Pages 1881-1890, March 2011. **SCI 2021 IF=8.263; Cited by 164**
92. **Hong, Wei-Chiang***, Dong, Y., Zheng, F., and Lai, C.-Y. "Forecasting urban traffic flow by SVR with continuous ACO," *Applied Mathematical Modelling*, 35(3) Pages 1282-1291, March 2011. **SCI 2021 IF=5.336; Cited by 108**
93. Dong, Y., **Hong, Wei-Chiang**, Xu, Y., and Yu, S. "Selecting the individual numerical scale and the prioritization method in the analytic hierarchy process: A 2-tuple fuzzy linguistic approach," *IEEE Transactions on Fuzzy Systems*, 19(1) Pages 13-25, February 2011. **SCI 2021 IF=12.253; Cited by 91**

2010

94. Lin, C.-T., **Hong, Wei-Chiang***, Chen, Y.-F., and Dong, Y. "Application of salesman-like recommendation system in 3G mobile phone online shopping decision support," *Expert Systems with Applications*, 37(12) Pages 8065-8078, December 2010. **SCI 2021 IF=8.665; Cited by 26**
95. **Hong, Wei-Chiang***"Application of chaotic ant swarm optimization in electric load forecasting," *Energy Policy*, 38(10) Pages 5830-5839, October 2010. **SSCI/SCI 2021 IF=7.576; Cited by 93**
96. Dong, Y., Zhang, G., **Hong, Wei-Chiang**, and Xu, Y. "Consensus models for AHP group decision making under row geometric mean prioritization method," *Decision Support Systems*, 49(3) Pages 281-289, June 2010. **SCI 2021 IF=6.969; Cited by 330**

97. **Hong, Wei-Chiang***, Dong, Y., Chen, L.-Y., and Lai, C.-Y. "Taiwanese 3G mobile phone demand forecasting by SVR with hybrid evolutionary algorithms," *Expert Systems with Applications*, 37(6) Pages 4452-4462, June 2010. **SCI 2021 IF=8.665; Cited by 21**

2009

98. **Hong, Wei-Chiang***"Hybrid evolutionary algorithms in a SVR-based electric load forecasting model," *International Journal of Electrical Power & Energy Systems*, 31(7-8) Pages 409-417, September 2009. **SCI 2021 IF=5.659; Cited by 90**
99. **Hong, Wei-Chiang***"Electric load forecasting by support vector model," *Applied Mathematical Modelling*, 33(5) Pages 2444-2454, May 2009. **SCI 2021 IF=5.336; Cited by 213**
100. **Hong, Wei-Chiang***"Global competitiveness measurement for the tourism sector," *Current Issues in Tourism*, 12(2) Pages 105-132, March 2009. **SSCI 2021 IF=7.578; Cited by 83**
101. **Hong, Wei-Chiang***"Chaotic particle swarm optimization algorithm in a support vector regression electric load forecasting model," *Energy Conversion and Management*, 50(1) Pages 105-117, January 2009. **SCI 2021 IF=9.709; Cited by 245**

2008

102. **Hong, Wei-Chiang***"Rainfall forecasting by technological machine learning models," *Applied Mathematics and Computation*, 200(1) Pages 41-57, June 2008. **SCI 2021 IF=4.397; Cited by 145**

2007

103. Pai, P.-F., and **Hong, Wei-Chiang** "A recurrent support vector regression model in rainfall forecasting," *Hydrological Processes*, 21(6) Pages 819-827, March 2007. **SCI 2021 IF=3.784; Cited by 47**
104. **Hong, Wei-Chiang**, and Pai, P.-F. "Potential assessment of the support vector regression technique in rainfall forecasting," *Water Resources Management*, 21(2) Pages 495-513, February 2007. **SCI 2021 IF=4.426; Cited by 82**

2006

105. Pai, P.-F., and **Hong, Wei-Chiang** "Software reliability forecasting by support vector machines with simulated annealing algorithms," *Journal of Systems and Software*, 79(6) Pages 747-755, June 2006. **SCI 2021 IF=3.514; Cited by 147**
106. **Hong, Wei-Chiang**, and Pai, P.-F. "Predicting engine reliability by support vector machines," *International Journal of Advanced Manufacturing Technology*, 28(1-2) Pages 154-161, February 2006. **SCI 2021 IF=3.563; Cited by 80**

2005

107. Pai, P.-F., and **Hong, Wei-Chiang** "An improved neural network model in forecasting arrivals," *Annals of Tourism Research*, 32(4) Pages 1138-1141, October 2005. **SSCI 2021 IF=12.853; Cited by 84**
108. Pai, P.-F., and **Hong, Wei-Chiang** "Support vector machines with simulated annealing algorithms in electricity load forecasting," *Energy Conversion and Management*, 46(17) Pages 2669-2688, October 2005. **SCI 2021 IF=11.533; Cited by 327**

109. Pai, P.-F., and **Hong, Wei-Chiang** "Forecasting regional electric load based on recurrent support vector machines with genetic algorithms," *Electric Power Systems Research*, 74(3) Pages 417-425, June 2005. **SCI 2021 IF=3.818; Cited by 337**

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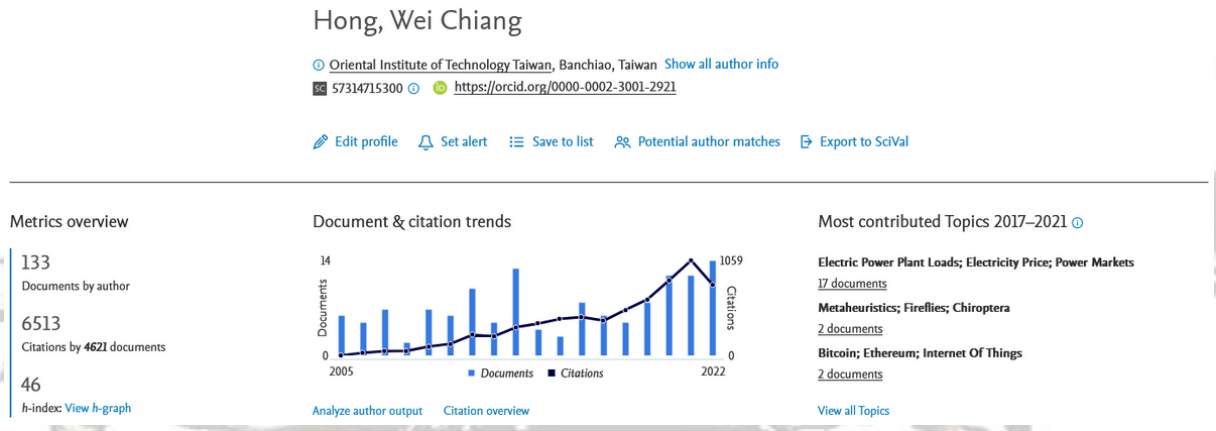

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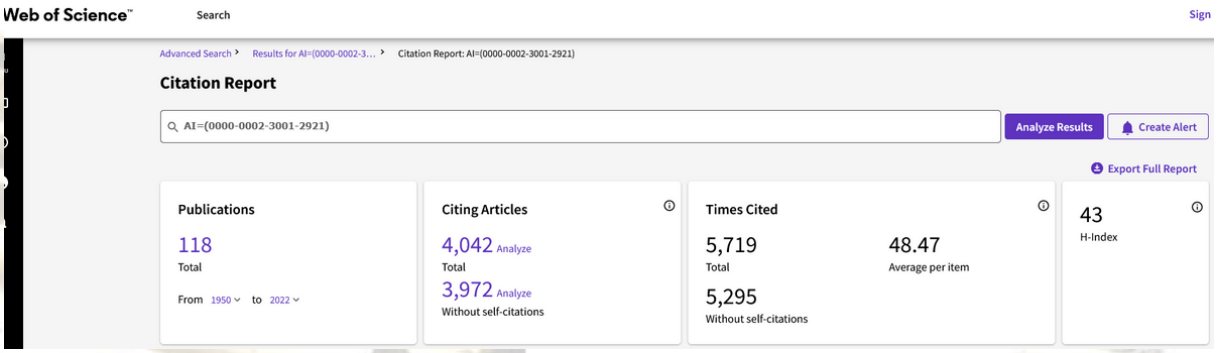

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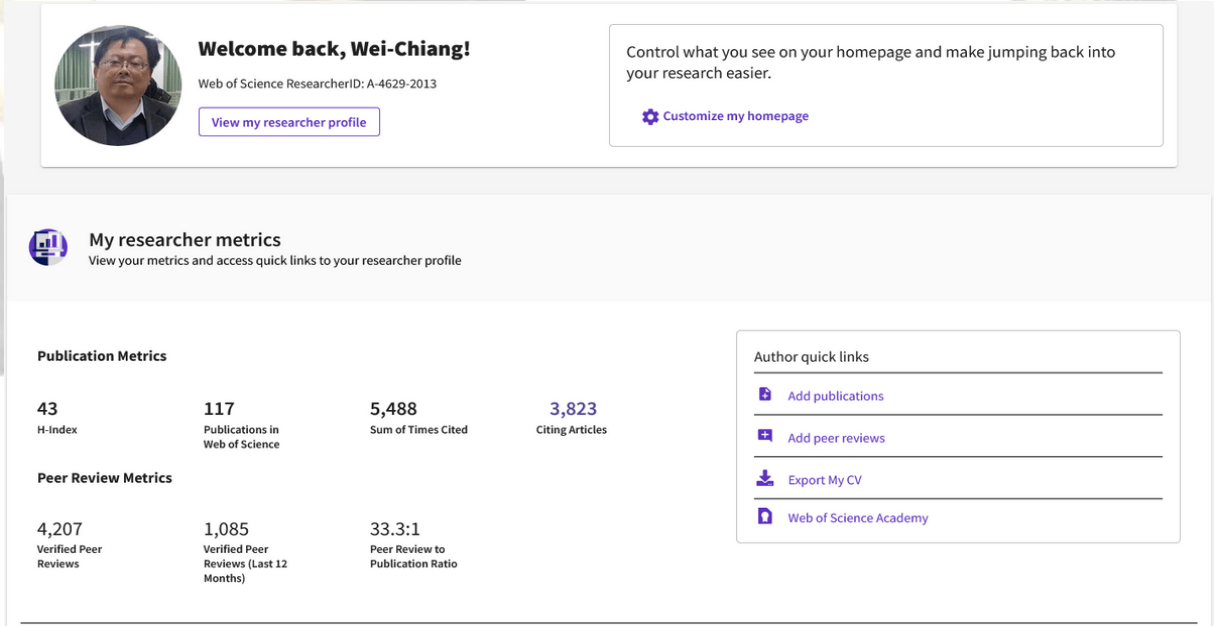

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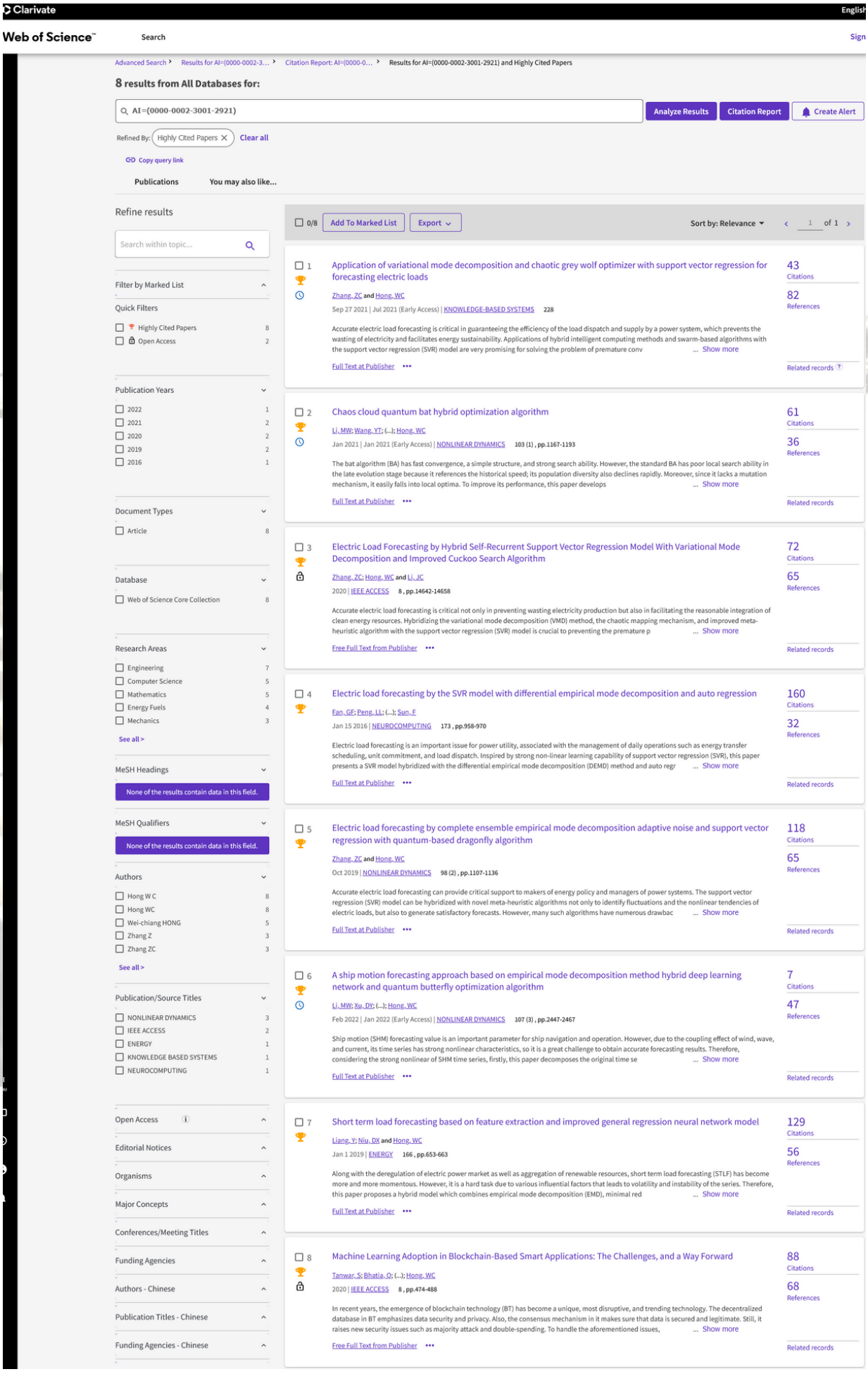

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1 Application of variational mode decomposition and chaotic grey wolf optimizer with support vector regression for forecasting electric loads
Zhang, ZC and Hong, WC
Sep 27 2021 | Jul 2021 (Early Access) | KNOWLEDGE-BASED SYSTEMS 228
Accurate electric load forecasting is critical in guaranteeing the efficiency of the load dispatch and supply by a power system, which prevents the wasting of electricity and facilitates energy sustainability. Applications of hybrid intelligent computing methods and swarm-based algorithms with the support vector regression (SVR) model are very promising for solving the problem of premature conv ... Show more
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2 Chaos cloud quantum bat hybrid optimization algorithm
Li, MW; Wang, YT; (...); Hong, WC
Jan 2021 | Jan 2021 (Early Access) | NONLINEAR DYNAMICS 103 (1) , pp.1167-1193
The bat algorithm (BA) has fast convergence, a simple structure, and strong search ability. However, the standard BA has poor local search ability in the late evolution stage because it references the historical speed; its population diversity also declines rapidly. Moreover, since it lacks a mutation mechanism, it easily falls into local optima. To improve its performance, this paper develops ... Show more
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3 Electric Load Forecasting by Hybrid Self-Recurrent Support Vector Regression Model With Variational Mode Decomposition and Improved Cuckoo Search Algorithm
Zhang, ZC; Hong, WC and Li, JC
2020 | IEEE ACCESS 8 , pp.14642-14658
Accurate electric load forecasting is critical not only in preventing wasting electricity production but also in facilitating the reasonable integration of clean energy resources. Hybridizing the variational mode decomposition (VMD) method, the chaotic mapping mechanism, and improved meta-heuristic algorithm with the support vector regression (SVR) model is crucial to preventing the premature p ... Show more
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4 Electric load forecasting by the SVR model with differential empirical mode decomposition and auto regression
Fan, GF; Peng, LL; (...); Sun, F
Jan 15 2016 | NEUROCOMPUTING 173 , pp.958-970
Electric load forecasting is an important issue for power utility, associated with the management of daily operations such as energy transfer scheduling, unit commitment, and load dispatch. Inspired by strong non-linear learning capability of support vector regression (SVR), this paper presents a SVR model hybridized with the differential empirical mode decomposition (DEMD) method and auto regr ... Show more
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5 Electric load forecasting by complete ensemble empirical mode decomposition adaptive noise and support vector regression with quantum-based dragonfly algorithm
Zhang, ZC and Hong, WC
Oct 2019 | NONLINEAR DYNAMICS 98 (2) , pp.1107-1136
Accurate electric load forecasting can provide critical support to makers of energy policy and managers of power systems. The support vector regression (SVR) model can be hybridized with novel meta-heuristic algorithms not only to identify fluctuations and the nonlinear tendencies of electric loads, but also to generate satisfactory forecasts. However, many such algorithms have numerous drawbac ... Show more
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6 A ship motion forecasting approach based on empirical mode decomposition method hybrid deep learning network and quantum butterfly optimization algorithm
Li, MW; Xu, DY; (...); Hong, WC
Feb 2022 | Jan 2022 (Early Access) | NONLINEAR DYNAMICS 107 (3) , pp.2447-2467
Ship motion (SHM) forecasting value is an important parameter for ship navigation and operation. However, due to the coupling effect of wind, wave, and current, its time series has strong nonlinear characteristics, so it is a great challenge to obtain accurate forecasting results. Therefore, considering the strong nonlinear of SHM time series, firstly, this paper decomposes the original time se ... Show more
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7 Short term load forecasting based on feature extraction and improved general regression neural network model
Liang, Y; Niu, DX and Hong, WC
Jan 1 2019 | ENERGY 166 , pp.653-663
Along with the deregulation of electric power market as well as aggregation of renewable resources, short term load forecasting (STLF) has become more and more momentous. However, it is a hard task due to various influential factors that leads to volatility and instability of the series. Therefore, this paper proposes a hybrid model which combines empirical mode decomposition (EMD), minimal red ... Show more
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8 Machine Learning Adoption in Blockchain-Based Smart Applications: The Challenges, and a Way Forward
Tanwar, S; Bhatia, Q; (...); Hong, WC
2020 | IEEE ACCESS 8 , pp.474-488
In recent years, the emergence of blockchain technology (BT) has become a unique, most disruptive, and trending technology. The decentralized database in BT emphasizes data security and privacy. Also, the consensus mechanism in it makes sure that data is secured and legitimate. Still, it raises new security issues such as majority attack and double-spending. To handle the aforementioned issues, ... Show more
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年度	補助類別	學門代碼	計畫名稱	擔任工作	核定經費(新台幣)
111	專題研究計畫 (一般研究計畫)	作業研究／數量方法	應用變分模態分解、深度學習網路和量子蝴蝶最佳化算法於電力負載複雜時間數列預測	計畫主持人	800,000
110	專題研究計畫 (一般研究計畫)	作業研究／數量方法	應用智慧量子計算機制於複雜時間數列預測—以太陽光能發電量預測為例	計畫主持人	810,000
108	專題研究計畫 (學術性專書寫作計畫)	作業研究／數量方法	複合智慧型科技於能源需求預測	計畫主持人	848,000
106	專題研究計畫 (一般研究計畫)	人工智慧與仿生計算	結合季節機制與費洛蒙最佳化混沌蟻群算法於電力負載預測	計畫主持人	1,756,000
104	專題研究計畫 (一般研究計畫)	作業研究／數量方法	多重季節機制與混沌雲退火、量子粒子算法於多重週期時間數列之預測應用	計畫主持人	689,000
103	短訪計畫 (邀請國際科技人士短期訪問)	作業研究／數量方法	關聖威 Steven Guan	計畫主持人	51,975
101	專題研究計畫 (學術性專書寫作計畫)	作業研究／數量方法	智慧型能源需求預測學術專書寫作	計畫主持人	392,000
100	延攬科技人才 (延攬博士後研究人才)	作業研究／數量方法	結合季節調校與混沌複合蜂群算法於週期性時間數列之預測	計畫主持人	608,604
100	專題研究計畫 (優秀年輕學者研究計畫)	作業研究／數量方法	結合季節調校與混沌複合蜂群算法於週期性時間數列之預測	計畫主持人	3,118,000
099	專題研究計畫 (一般研究計畫)	作業研究／數量方法	混沌演化式算法於參數最佳化與預測支援之應用	計畫主持人	368,000
098	專題研究計畫 (一般研究計畫)	作業研究／數量方法	混合演化式算法於預測模型參數最佳化之應用	計畫主持人	511,000
098	延攬科技人才 (延攬博士後研究人才)	作業研究／數量方法	混合演化式算法於預測模型參數最佳化之應用	計畫主持人	702,641
097	專題研究計畫 (新進人員研究計畫)	作業研究／數量方法	預測支援系統之建構與應用	計畫主持人	420,000

Professional Societies & Services(學術社團與學術服務)

- **Senior Member**, IEEE (Institute of Electrical and Electronics Engineers), USA, since 2010. **(IEEE 學會高級會員)**
- **IEEE Senior Member Application Review Panel (IEEE 高級會員審查小組委員** 2015, 2017**)**
- **International Conference General Chair / Co-Chair (國際學術會議主席/共同主席):** APCERSSH (2022), ICRIC (2019, 2020).
- **International Conference Honorary Chair (國際學術會議榮譽主席):** AIHPC (2022), FTNCT (2018-2020), IC4S (2019, 2021), ETCCS (2019-2021), SNC (2021).
- **International Conference Workshop Chair (國際學術會議工作坊主席):** 6GIoTT (2022).
- **International Conference Technical Program Co-Chair (國際學術會議程式委員會共同主席):** FTNCT (2018-2020), IEEE ITNEC (2016-2020), ICBDBI (2017), ICRIC (2021).
- **International Conference Publicity / Special Session Chair (國際學術會議特別議程暨公共關係委員會主席):** SEMCCO (2011-2015).
- **International Conference Advisory Committee (國際學術會議諮詢委員會委員):** SEMCCO (2010, 2013-2016), FANCCO (2013-2016), SOCPROS (2011-2015), ICRSI (2013), ICCS (2012), NCETET (2014), WCCS (2014), ICMNWC (2021), ICRIC (2021).
- **Project Reviewer (科研項目、研究計畫審查委員):**
  - **Zhejiang Provincial Natural Science Foundation** (2017-2019)[浙江省自然科學基金傑出青年項目、優秀青年項目、重點項目、面上項目審查員]
  - **National Science and Technology Council (NSTC), Taiwan** (2016) [國家科學及技術委員會(台灣)一般型研究計畫審查員]
- **External Examiner of PhD Degrees (海外博士學位答辯委員):**
  - **Nirma University, India** (2021)
  - **Vellore Institute of Technology University, India** (2020, 2021)
  - **Anna University, India** (2009-2021)

- **University of Petroleum & Energy Studies, India** (2019)
- **Jaypee University of Information Technology, India** (2019-2022)
- **Indian Institute of Technology, India** (2015)

❖ **Invited Lecture (特邀報告)**

2022

- Chaos cloud quantum bat algorithm and its applications, Department of Information Management, Yuan Ze University, Taoyuan, Taiwan, May 16.

2021

- Chaos cloud quantum bat hybrid optimization algorithm, School of Information and Control Engineering, China University of Mining and Technology, Xuzhou, China, May 7.

2020

- Quantum computing mechanism-- Case of hybridizing with meta-heuristic algorithms, School of Information and Control Engineering, China University of Mining and Technology, Xuzhou, China, January 7.

2019

- Academic research papers editing & reviewing experiences, School of Economics and Management, North China Electric Power University, Beijing, China, December 3.
- Hybrid quantum computing mechanism with meta-heuristic algorithms, School of Computer Science and Technology, Jiangsu Normal University, Xuzhou, China, November 6.
- Hybrid quantum computing mechanism with swarm-based meta-heuristic algorithms, Department of Applied Physics, National Kaoshiung University, Taiwan, February 27.

2017

- Academic journals editing & reviewing experiences, School of Management, Fujian University of Technology, China, May 24.
- Research paper writing skills & reviewing experiences, School of Education Intelligent Technology, Jiangsu Normal University, China, April 20.
- Academic research papers editing & reviewing experiences, College of Shipbuilding Engineering, Harbin Engineering University, China, January 13.

2015

- Seasonal mechanism and hybrid algorithms for accuracy improvement, Department of Information Management, National United University, Taiwan, April 9.

2014

- The Developmental Tendency of Evolutionary Algorithms, School of Information, Zhejiang University of Finance & Economics, China, July 5.

2013

- How to prepare a high quality academic research paper, School of Information, Zhejiang University of Finance & Economics, China, November 12.

- Seasonal mechanism and hybrid algorithms for big data processing, School of Information, Zhejiang University of Finance & Economics, China, August 7-13.

2011

- Applications of Hybrid Evolutionary Algorithms in Forecasting, Department of Transportation Science, National Taiwan Ocean University, Taiwan, November 3.
- Experiences exchange in academic paper writing, Research and Development, Oriental Institute of Technology, Taiwan, October 19.

2010

- Forecasting Support Systems and Relevant applications, School of Information, Zhejiang University of Finance & Economics, China, March 6-10.

2009

- Applications of Forecasting Support Systems, Graduate Institute of Applied Statistics, Fu-Jen Catholic University, Taiwan, October 21.

❖ **International Conference Technical Program Committee (國際學術會議程式委員會委員):**

2023

- ICAART (2023), ICEIS (2023), I2ST (2023).

2022

- IC4S (2022), COMSYS (2022), IEEE ICMLA (2022), 3ICT (2022), FCTA (2022), IEEE ICIR (2022), KES (2022), SOCO (2022), CSI (2022), ISI (2022), SETCAC (2022), MobiApps (2022), ICDATA (2022), ICDIPV (2022), JCSSE (2022), ACIIDS (2022), ICCCSET (2022), IEEE INFOCOM Workshop-The 6th IEEE Workshop on 5G and Beyond Wireless Security (2022), ICEIS (2022), ICIC (2022), INTELLI (2022), ICAS (2022), BUSTECH (2022), PATTERNS (2022), FUTURE COMPUTING (2022), SERVICECOMPUTATION (2022), CICS (2022), ICAART (2022), NATP (2022), AIHPC (2022), CHSN (2022), ICRIC (2022), NATL (2022), I2ST (2022), IDEAL (2022), SIGV (2022), ICSEVEN (2022), SIBF (2022), ICDABI (2022), IFC (2022).

2021

- IEEE ICMLA (2021), CHSN (2021), ICDATA (2021), ICMNWC (2021), FCTA (2021), IEEE MysuruCon (2021), COMSYS (2021), SOCO (2021), ETCCS (2021), ICCGI (2021), INTELLI (2021), ICIECT (2021), JCSSE (2021), IWANN (2021), ICAS (2021), ICIR (2021), ICRIC (2021), ICEIS (2021), PATTERNS (2021), ICAART (2021), KST (2021), NLP (2021), ICI2C (2021), 3ICT (2021), CSTFM (2021), NLTM (2021), IC4S (2021), SRC (2021), DATA (2021), ICSCGE (2021), IDEAL (2021), MIND (2021).

2020

- IDEAL (2020), SIRS (2020), FCTA (2020), FTNCT (2020), ICIC (2020), CoCoNet (2020), ICIC (2020), KES (2020), ICDATA (2020), ICNC-FSKD (2020), ICCGI (2020), INTELLI (2020), SOCO (2020), ICIECT (2020), ICAS (2020), JCSSE (2020), ICEIS (2020), PATTERNS (2020), BUSTECH (2020), SERVICE COMPUTATION (2020), FUTURE COMPUTING (2020), MIND (2020), ICRIC (2020), ICAART (2020).

2019

- ETCCS (2019), ICACCI (2019), SETCAC (2019), SIRS (2019), ACN (2019), ISTA (2019), TPNC (2019), ICACCT (2019), IDEAL (2019), ICCIS (2019), IJCCI (2019), FTNCT (2019), IC4S (2019), FCTA (2019), KES (2019), ICIC (2019), INTELLI (2019), ICDATA (2019), ICCGI (2019), IWANN (2019), ICACI (2019), ICAS (2019), SOCO (2019), BUSTECH (2019), PATTERNS (2019), SERVICE COMPUTATION (2019), FUTURE COMPUTING (2019), ICEIS (2019), WCCS (2019), ICRIC (2019), MIND (2019), ISCMM (2019), ICACCP (2019), ICAART (2019).

2018

- PDGC (2018), IEEE ICMLA (2018), SocProS (2018), IDEAL (2018), IEEE SMC (2018), IJCCI (2018), ICACCI (2018), SETCAC (2018), ISI (2018), SIRS (2018), SENSE (2018), ITISE (2018), KES (2018), ICIC (2018), IIC (2018), LISS (2018), ICDATA (2018), ICNC-FSKD (2018), JCSSE (2018), ICT-ISPC (2018), FC (2018), ICCGI (2018), INTELL (2018), SOCO (2018), ICAS (2018), WOMRAC (2018), ICSEVEN (2018), ISMSI (2018), ICEIS (2018), PATTERNS (2018), SERVICE COMPUTATION (2018), FUTURE COMPUTING (2018), FTNCT (2018), ICAART (2018).

2017

- RTORS (2017), SocProS (2017), IEEE ICMLA (2017), ICAOR (2017), SoCPaR (2017), BICTA (2017), RESEECS (2017), SEAL (2017), IJCCI (2017), IDEAL (2017), ITISE (2017), ICACCI (2017), SIRS (2017), SENSE (2017), ISI (2017), SETCAC (2017), KES (2017), SOCO (2017), ICIC (2017), ICNC-FSKD (2017), ICCGI (2017), INTELL (2017), DMIN (2017), JCSSE (2017), ICBDBI (2017), IWANN (2017), ICAS (2017), ICEIS (2017), ITCS (2017), ICAART (2017), PATTERNS (2017), SERVICE COMPUTATION (2017).

2016

- CASoN (2016), SoCPaR (2016), IEEE ICMLA (2016), ISDA (2016), WICT (2016), TPNC (2016), CCNN (2016), NaBIC (2016), HIS (2016), IBICA (2016), IAS (2016), INTELLI (2016), ICCGI (2016), ECTA (2016), BIC-TA (2016), SOCO (2016), IDEAL (2016), IEEE SMC (2016), ENVICET (2016), ENEFM (2016), ICACCI (2016), ISI (2016), SETCAC (2016), KES (2016), IEEE CBI (2016), SSME (2016), ICNC-FSKD (2016), ICIC (2016), DMIN (2016), JCSSE (2016), ITISE (2016), ICAS (2016), ISCS (2016), ICEIS (2016), PATTERNS (2016), SERVICE COMPUTATION (2016), ICAART (2016).

2015

- SIRS (2015), SETCAC (2015), IBICA (2015), WCSN (2015), SIMPDA (2015), ISDA (2015), IAS (2015), NaBIC (2015), CASoN (2015), WICT (2015), ADMMET (2015), WCCS (2015), HIS (2015), SoCPaR (2015), ECTA (2015), IDEAL (2015), ICCGI (2015), INTELLI (2015), BIC-TA (2015), KES (2015), ICIC (2015), ICNC-FSKD (2015), IIC (2015), ICACCI (2015), SENSE (2015), ICCME (2015), DMIN (2015), LISS (2015), IAM (2015 Summer), ITISE (2015), HAIS (2015), SOCO (2015), IWANN (2015), ICAS (2015),

ICEIS (2015), ACIIDS (2015), SERVICE COMPUTATION (2015), PATTERNS (2015), IEEE SPICES (2015), SENSORNETS (2015), DaEng (2015), ICAART (2015).

2014

- SEAL (2014), HIS (2014), WICT (2014), ICICT (2014), ISDA (2014), SIMPDA (2014), WCCS (2014), BIC-TA (2014), ECTA (2014), IEEE SMC (2014), ICACCI (2014), KiSE (2014), IEEE BDSE (2014), KES (2014), IDEAL (2014), ICNC-FSKD (2014), SoCPaR (2014), ICIC (2014), NaBIC (2014), CASoN (2014), LISS (2014), DMIN (2014), SOCO (2014), ITISE (2014), ICCGI (2014), INTELLI (2014), ECC (2014), HAIS (2014), SERVICE COMPUTATION (2014), PATTERNS (2014), ICEIS (2014), ACIIDS (2014), ICAART (2014), SENSORNETS (2014).

2013

- SEMCCO (2013), FANCCO (2013), SoCPaR (2013), WICT (2013), ISDA (2013), NWeSP (2013), ICMLA (2013), SITIS (2013), HIS (2013), IEEE BDSE (2013), CECNet (2013), IC2INT (2013), IEEE CIS (2013), IDEAL (2013), IEEE SMC (2013), ECTA (2013), SOCO (2013), HAIS (2013), KES (2013), ICSEC (2013), SIMPDA (2013), ICGEC (2013), KiSE (2013), LISS (2013), CASoN (2013), NaBIC (2013), ICIC (2013), ICNC-FSKD (2013), IEEE DEST-CEE (2013), DMIN (2013), ICCGI (2013), BIC-TA (2013), ICEIS (2013), IEEE BigData Congress (2013), IEEE CEC (2013), IWANN (2013), SCET (2013), SERVICE COMPUTATION (2013), PATTERNS (2013), INTELLI (2013), FOCI (2013), ICAART (2013).

2012

- SOCPROS (2012), BIC-TA (2012), ICMLA (2012), SOCPAR (2012), AMLTA (2012), AI (2012), HIS (2012), ISDA (2012), CASoN (2012), NWeSP (2012), ICCS (2012), NaBIC (2012), WICT (2012), ISICA (2012), SOCO (2012), IDEAL (2012), ICGEC (2012), ICIC (2012), DMIN (2012), LISS (2012), ICEIS (2012), SEDEXS (2012), PATTERNS (2012), ICCGI (2012), IEEE DEST-CEE (2012), SIMPDA (2012), SCET (2012), INTELLI (2012), CECNet (2012), HAIS (2012), ACAI (2012), ICAART (2012).

2011

- AI (2011), HIS (2011), ICETET (2011), CASoN (2011), NaBIC (2011), NWeSP (2011), IEEE SMC (2011), BIC-TA (2011), PATTERNS (2011), IDEAL (2011), ICIC (2011), ICCISC (2011), ICNC-FSKD (2011), DMIN (2011), SIMPDA (2011), IWANN (2011), ICEIS (2011), LISS (2011), IEEE DEST (2011), HAIS (2011), IEME (2011), CSO (2011), IEEE FOCI (2011), ICAISC (2011), SOCO (2011), ICAART (2011).

2010

- NaBIC (2010), SEMCCO (2010), SoCPaR (2010), AI (2010), ICISE (2010), IEEE ICETET (2010), ISICA (2010), IEEE SMC (2010), LSMS-ICSEE (2010), CIML (2010), BIC-TA (2010), IDEAL (2010), HIS (2010), ICIC (2010), IEEE CIS (2010), HAIS (2010), SOCO (2010), ICEIS (2010), CSO (2010), IEEE ICNSC (2010), ICAART (2010).

2009

- INC (2009), NABIC (2009), SOCPAR (2009), AI (2009), ISICA (2009), IDEAL (2009), ICIC (2009), IWANN (2009), SOCO (2009), HAIS (2009), PCO (2009), IEEE CEC (2009), ICEIS (2009), IEEE ICNSC (2009), ICAART (2009).

2008

- ISICA (2008), SEAL (2008), AI (2008), IEEE SMC (2008), BIC-TA (2008), IEEE CIS (2008), HAIS (2008), ICIC (2008), IEEE CASE (2008), ICNC (2008), ICMIC (2008), IEEE SMCia (2008), ICEIS (2008), IEEE CEC (2008), IEEE ICNSC (2008).

2007

- IEEE CEC (2007), ISICA (2007), BIC-TA (2007), GEM (2007).

❖ **Reviewer of Academic Journals/Conferences/Book proposal (學術期刊、會議、專書計畫審查員):**

2022 年總計審查 784 篇論文，其中 676 篇為 SCI/SSCI 期刊文章。

- *Journal of Medical Virology* (8 papers), *Energy Conversion and Management* (8 papers), *IEEE Transactions on Systems, Man and Cybernetics: Systems* (3 papers), *Applied Energy* (1 paper), *Journal of Cleaner Production* (13 papers), *Sustainable Cities and Society* (4 papers), *IEEE Transactions on Intelligent Transportation Systems* (2 papers), *Applied Soft Computing* (16 papers), *Information Sciences* (7 papers), *IEEE Transactions on Industrial Electronics* (1 paper), *Knowledge-Based Systems* (3 papers), *CAAI Transactions on Intelligence Technology* (1 paper), *Tourism Review* (2 papers), *Tourism Management Perspectives* (1 paper), *Current Issues in Tourism* (3 papers), *IEEE Transactions on Power Systems* (4 papers), *Computers & Industrial Engineering* (12 papers), *Decision Support Systems* (1 paper), *Financial Innovation* (3 papers), *Engineering Applications of Computational Fluid Mechanics* (2 papers), *Journal of Computational Design and Engineering* (1 paper), *Air Quality, Atmosphere & Health* (1 paper), *Neurocomputing* (6 papers), *Computer Communications* (3 papers), *Applied Intelligence* (15 papers), *Energy Reports* (20 papers), *International Journal of Machine Learning and Cybernetics* (12 papers), *International Journal of Fuzzy Systems* (4 papers), *Sustainability* (2 papers), *Sensors* (11 papers), *Biomimetics* (2 papers), *Soft Computing* (27 papers), *Micromachines* (1 paper), *International Journal of Information Technology & Decision Making* (1 paper), *IEEE Access* (15 papers), *Energies* (5 papers), *Utilities Policy* (1 paper), *Symmetry* (8 papers), *Health Informatics Journal* (2 papers), *Applied Sciences* (2 papers), *Computational and Mathematical Methods in Medicine* (2 papers), *Entropy* (1 paper), *Electronics* (8 papers), *Optimization and Engineering* (1 paper), *Mathematics* (12 papers), *Multimedia Tools and Applications* (376 papers), *Kybernetes* (3 papers), *Mathematical Biosciences and Engineering* (3 papers), *Applied Economics* (2 papers), *Journal of Intelligent & Fuzzy Systems* (24 papers), *Polish Journal of Environmental Studies* (1 paper), *Computer Methods in Biomechanics and Biomedical Engineering* (3 papers), *Advances in Mechanical Engineering* (1 paper), *Network: Computation in Neural Systems*

(1 paper), *International Journal of Uncertainty, Fuzziness and Knowledge-based Systems* (1 paper), *Machine Learning and Knowledge Extraction* (2 papers).

2021 年總計審查 1,062 篇論文，其中 867 篇為 SCI/SSCI 期刊文章。

- *IEEE Transactions on Systems, Man and Cybernetics: Systems* (6 papers), *IEEE Transactions on Evolutionary Computation* (1 paper), *ACM Computer Surveys* (1 paper), *Applied Energy* (3 papers), *Energy Conversion and Management* (8 papers), *Journal of Cleaner Production* (12 papers), *Engineering Applications of Computational Fluid Mechanics* (3 papers), *IEEE Transactions on Industrial Electronics* (1 paper), *International Journal of Production Economics* (2 papers), *Sustainable Cities and Society* (6 papers), *Current Issues in Tourism* (3 papers), *Energy* (1 paper), *Journal of Ambient Intelligence and Humanized Computing* (1 paper), *Energy Economics* (2 papers), *Expert Systems with Applications* (1 paper), *Energy Reports* (23 papers), *Information Sciences* (7 papers), *Journal of Environmental Management* (4 papers), *Applied Soft Computing* (31 papers), *IEEE Transactions on Power Systems* (26 papers), *Tourism Management Perspectives* (4 papers), *IEEE Transactions on Engineering Management* (4 papers), *Energy & Buildings* (1 paper), *Journal of Computational Design and Engineering* (3 papers), *Decision Support Systems* (2 papers), *Neurocomputing* (5 papers), *Computers & Industrial Engineering* (14 papers), *International Journal of Energy Research* (3 papers), *Nonlinear Dynamics* (2 papers), *Complex & Intelligent Systems* (1 paper), *International Journal of F4zzy Systems* (9 papers), *Computers in Biology and Medicine* (1 paper), *Scientific Reports* (5 papers), *Energy Science & Engineering* (1 paper), *Mechanics of Advanced Materials and Structures* (2 papers), *International Journal of Machine Learning and Cybernetics* (2 papers), *Advanced Theory and Simulations* (2 papers), *Financial Innovation* (1 paper), *IEEE Systems Journal* (1 paper), *Soft Computing* (20 papers), *Computational Intelligence and Neuroscience* (20 papers), *Materials* (2 papers), *Sensors* (9 papers), *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects* (1 paper), *IEEE Access* (134 papers), *Journal of Modern Power Systems and Clean Energy* (1 paper), *Sustainability* (5 papers), *Plos One* (1 paper), *Engineering Optimization* (1 paper), *IEEE Signal Processing Letters* (1 paper), *Energies* (36 papers), *Journal of Nanomaterials* (1 paper), *International Transactions on Electrical Energy Systems* (1 paper), *Complexity* (19 papers), *Utilities Policy* (1 paper), *Multimedia Tools and Applications* (195 papers), *Symmetry* (11 papers), *Proceedings of the Royal Society A* (1 paper), *Journal of Healthcare Engineering* (1 paper), *Healthcare* (2 papers), *Entropy* (2 papers), *IET Intelligent Transport Systems* (2 papers), *Journal of The Royal Statistical Society Series A-Statistics in Society* (1 paper), *Journal of Advanced Transportation* (3 papers), *Electronics* (10 papers), *Journal of Food Process Engineering* (1 paper), *Journal of Experimental & Theoretical Artificial Intelligence* (1 paper), *Wireless Communications & Mobile Computing* (6 papers), *Journal of Forecasting* (1 paper), *Computational Intelligence* (1 paper), *Journal of Medical Virology* (1 paper), *Mathematics* (119 papers),

Computational and Mathematical Methods in Medicine (1 paper), *IETE Technical Review* (1 paper), *Journal of Sensors* (2 papers), *International Journal of Photoenergy* (2 papers), *Mathematical Biosciences and Engineering* (2 papers), *International Journal of Communication Systems* (2 papers), *Advances in Civil Engineering* (2 papers), *IET Science, Measurement & Technology* (1 paper), *International Journal of Pest Management* (2 papers), *Applied Bionics and Biomechanics* (1 paper), *Computer Methods in Biomechanics and Biomedical Engineering* (1 paper), *International Journal of Computational Intelligence Systems* (5 papers), *Applied Artificial Intelligence* (2 papers), *Shock and Vibration* (2 papers), *Concurrence and Computation: Practice & Experience* (2 papers), *International Journal of Uncertainty, Fuzziness and Knowledge-based Systems* (5 papers), *IET Software* (1 paper), *SAGE OPEN* (1 paper), *Discrete Dynamics in Nature and Society* (2 papers), *Electronics Letters* (2 papers), *Advances in Mechanical Engineering* (1 paper), *Mathematical Problems in Engineering* (21 papers), *Open Geosciences* (1 paper), *Advances in Mathematical Physics* (1 paper), *Scientific Programming* (1 paper), *Journal of Mathematics* (7 papers), *IEEE Industry Applications Magazine* (3 papers), *Journal of Electrical and Computer Engineering* (1 paper), *Suranaree Journal of Science and Technology* (3 papers), *Journal of Intelligent & Fuzzy Systems* (38 papers).

2020 年總計審查 763 篇論文，其中 620 篇為 SCI/SSCI 期刊文章。

- *IEEE Transactions on Systems, Man and Cybernetics: Systems* (1 paper), *Applied Energy* (7 papers), *IEEE Network* (2 papers), *Energy Conversion and Management* (11 papers), *Journal of Cleaner Production* (14 papers), *Science of the Total Environment* (1 paper), *Energy* (12 papers), *IEEE Transactions on Power Systems* (19 papers), *Knowledge-Based Systems* (1 paper), *Information Sciences* (7 papers), *Artificial Intelligence Review* (1 paper), *Journal of Environmental Management* (2 papers), *Applied Soft Computing* (15 papers), *Building and Environment* (1 paper), *Decision Support Systems* (1 paper), *Sustainable Cities and Society* (2 papers), *Nonlinear Dynamics* (1 paper), *International Journal of Production Research* (1 paper), *Neurocomputing* (11 papers), *International Journal of Fuzzy Systems* (8 papers), *Current Issues in Tourism* (2 papers), *Computers & Industrial Engineering* (23 papers), *Chaos, Solitons & Fractals* (2 papers), *International Journal of Machine Learning and Cybernetics* (3 papers), *IEEE Access* (47 papers), *International Journal of Energy Research* (4 papers), *Tourism Management Perspectives* (10 papers), *Energy Reports* (1 paper), *International Journal of Electrical Power and Energy Systems* (2 papers), *Atmospheric Pollution Research* (1 paper), *Measurement* (2 papers), *Sensors* (2 papers), *Journal of Modern Power Systems and Clean Energy* (3 papers), *Soft Computing* (54 papers), *Financial Innovation* (2 papers), *Air Quality, Atmosphere and Health* (1 paper), *International Journal of Environmental Research and Public Health* (2 papers), *Plos One* (2 papers), *Energies* (33 papers), *Symmetry* (13 papers), *Sustainability* (4 papers), *Applied Sciences* (2 papers), *Transportmetrica A: Transport Science* (2 papers), *Multimedia Tools and Applications* (222 papers), *Journal of Parallel and Distributed*

Computing (2 papers), *Journal of the Operational Research Society* (1 paper), *Journal of Intelligent & Fuzzy Systems* (27 papers), *International Journal of Computational Intelligence Systems* (5 papers), *Mathematics* (7 papers), *Journal of Food Process Engineering* (1 paper), *Journal of Advanced Transportation* (1 paper), *Measurement & Control* (3 papers), *Concurrence and Computation: Practice and Experience* (3 papers), *Polish Journal of Environmental Studies* (1 papers), *International Journal of Uncertainty, Fuzziness and Knowledge-based Systems* (3 papers), *Mathematical Problems in Engineering* (4 papers), *SAGE Open* (1 paper), *Journal of Mathematics* (1 paper).

2019 年總計審查 411 篇論文，其中 342 篇為 SCI/SSCI 期刊文章。

- *IEEE Transactions on Evolutionary Computation* (2 papers), *Applied Energy* (8 papers), *IEEE Transactions on Power Systems* (13 papers), *Energy* (48 papers), *Information Sciences* (4 papers), *Applied Soft Computing* (17 papers), *Journal of Environmental Management* (2 papers), *Sustainable Cities and Society* (1 paper), *IEEE Access* (17 papers), *Neurocomputing* (12 papers), *Decision Support Systems* (1 paper), *International Journal of Machine Learning and Cybernetics* (1 paper), *Computers & Industrial Engineering* (25 papers), *Current Issues in Tourism* (1 paper), *Human-centric Computing and Information Sciences* (1 paper), *International Journal of Production Research* (3 papers), *Computers and Electronics in Agriculture* (2 papers), *International Journal of Fuzzy Systems* (3 papers), *Sensors* (5 papers), *Electric Power Systems Research* (1 paper), *International Journal of Information Technology & Decision Making* (4 papers), *Atmospheric Pollution Research* (2 papers), *Soft Computing* (75 papers), *Computer Communications* (2 papers), *Energies* (32 papers), *Sustainability* (3 papers), *Tourism Management Perspectives* (7 papers), *Entropy* (1 paper), *Annals of Operations Research* (1 paper), *Applied Sciences-Basel* (1 paper), *International Journal of Computational Intelligence Systems* (9 papers), *International Journal of Bifurcation and Chaos* (2 papers), *Symmetry* (5 papers), *Journal of Experimental & Theoretical Artificial Intelligence* (3 papers), *Atmosphere* (1 paper), *Transportmetrica A: Transport Science* (1 paper), *Journal of Advanced Transportation* (2 papers), *Processes* (2 papers), *Cluster Computing* (1 paper), *Electronics* (1 paper), *Journal of Intelligent & Fuzzy Systems* (7 papers), *Annals of Telecommunications* (1 paper), *Journal of Information Security and Applications* (1 paper), *International Journal of Uncertainty, Fuzziness and Knowledge-based Systems* (1 paper), *Mathematics* (4 papers), *Computer Modeling in Engineering & Sciences* (2 papers), *IEICE Transactions on Information and Systems* (2 papers), *Complexity* (1 paper).

2018 年總計審查 422 篇論文，其中 295 篇為 SCI/SSCI 期刊文章。

- *IEEE Transactions on Cybernetics* (1 paper), *Applied Energy* (19 papers), *Energy* (11 papers), *Information Sciences* (5 papers), *Applied Soft Computing* (35 papers), *Nonlinear Dynamics* (1 paper), *International Journal of Electrical Power & Energy Systems* (2 papers), *IEEE Access* (2 papers), *Neurocomputing* (2 papers), *Decision Support Systems* (2 papers), *International Journal of Machine Learning and Cybernetics* (6

papers), *Computers & Industrial Engineering* (2 papers), *Computer Methods and Programs in Biomedicine* (1 paper), *Current Issues in Tourism* (1 paper), *International Journal of Forecasting* (1 paper), *International Journal of Production Research* (2 papers), *Computers and Electronics in Agriculture* (2 papers), *International Journal of Fuzzy Systems* (6 papers), *Sensors* (7 papers), *Data Mining and Knowledge Discovery* (1 paper), *International Journal of Information Technology & Decision Making* (3 papers), *Applied Mathematical Modelling* (5 papers), *Proceedings of the Royal Society A: Mathematical, Physical & Engineering Sciences* (1 paper), *Measurement* (9 papers), *Soft Computing* (50 papers), *Energies* (56 papers), *Sustainability* (12 papers), *Tourism Management Perspectives* (2 papers), *International Journal of Environmental Research and Public Health* (1 paper), *Entropy* (1 paper), *Annals of Operations Research* (1 paper), *Applied Sciences-Basel* (2 papers), *International Journal of Computational Intelligence Systems* (1 paper), *Symmetry* (4 papers), *Economic Modelling* (1 paper), *Transportmetrica A: Transport Science* (1 paper), *Journal of Advanced Transportation* (5 papers), *Engineering Optimization* (1 paper), *Electronics* (1 paper), *Journal of Food Process Engineering* (3 papers), *Mathematical Problems in Engineering* (10 papers), *International Journal of Aerospace Engineering* (1 paper).

2017 年總計審查 338 篇論文，其中 214 篇為 SCI/SSCI 期刊文章。

- *IEEE Transactions on Evolutionary Computation* (5 papers), *IEEE Transactions on Neural Networks and Learning Systems* (5 papers), *Applied Energy* (11 papers), *Tourism Management* (1 paper), *Journal of Cleaner Production* (2 papers), *IEEE Transactions on Power Systems* (11 papers), *Energy* (2 papers), *Future Generation Computer Systems* (3 papers), *Energy and Buildings* (3 papers), *Nonlinear Dynamics* (1 paper), *Information Sciences* (2 papers), *IEEE Transactions on Intelligent Transportation Systems* (3 papers), *Applied Soft Computing* (30 papers), *IEEE Access* (1 paper), *Current Issues in Tourism* (3 papers), *Neurocomputing* (5 papers), *International Journal of Machine Learning and Cybernetics* (2 papers), *Energies* (23 papers), *International Journal of Production Research* (4 papers), *Data Mining and Knowledge Discovery* (1 paper), *International Journal of Fuzzy Systems* (7 papers), *Soft Computing* (35 papers), *Entropy* (1 paper), *International Journal of Bio-Inspired Computation* (1 paper), *Measurement* (7 papers), *Chaos, Solitons & Fractals* (2 papers), *Sustainability* (5 papers), *Complexity* (2 papers), *International Journal of Distributed Sensor Networks* (2 papers), *International Journal of Information Technology & Decision Making* (1 paper), *International Journal of Communication Systems* (2 papers), *Computational Intelligence and Neuroscience* (1 paper), *Cluster Computing* (2 papers), *International Journal of Bifurcation and Chaos* (1 paper), *Journal of the Operational Research Society* (1 paper), *IET Intelligent Transport Systems* (1 paper), *Computational Intelligence* (2 papers), *Symmetry* (12 papers), *International Journal of Uncertainty, Fuzziness and Knowledge-based Systems* (3 papers),

Journal of Scheduling (1 paper), *Polish Journal of Environmental Studies* (1 paper), *Discrete Dynamics in Nature and Society* (1 paper).

2016 年總計審查 298 篇論文，其中 155 篇為 SCI/SSCI 期刊文章。

- *IEEE Transactions on Evolutionary Computation* (7 papers), *Renewable & Sustainable Energy Reviews* (2 papers), *Applied Energy* (11 papers), *IEEE Transactions on Neural Networks and Learning Systems* (1 paper), *IEEE Transactions on Power Systems* (8 papers), *Information Sciences* (6 papers), *Energy* (5 papers), *Energy and Buildings* (1 paper), *Future Generation Computer Systems* (2 papers), *Expert Systems with Applications* (1 paper), *IEEE Transactions on Intelligent Transportation Systems* (1 paper), *Applied Soft Computing* (23 papers), *Nonlinear Dynamics* (2 papers), *Neurocomputing* (6 papers), *Decision Support Systems* (1 paper), *Computers & Industrial Engineering* (1 paper), *Soft Computing* (19 papers), *Current Issues in Tourism* (1 paper), *Measurement* (12 papers), *Energies* (8 papers), *Physica A: Statistical Mechanics and its Applications* (1 paper), *International Journal of Fuzzy Systems* (3 papers), *Cluster Computing* (2 papers), *International Journal of Bio-Inspired Computation* (2 papers), *Entropy* (3 papers), *Sustainability* (5 papers), *Journal of Sensors* (1 paper), *International Journal of Machine Learning and Cybernetics* (2 papers), *Chaos, Solitons & Fractals* (3 papers), *Journal of Experimental & Theoretical Artificial Intelligence* (1 paper), *International Journal of Bifurcation and Chaos* (2 papers), *Computational Intelligence and Neuroscience* (3 papers), *IET Intelligent Transport Systems* (1 paper), *International Journal of Information Technology & Decision Making* (1 paper), *Journal of Renewable and Sustainable Energy* (1 paper), *Journal of the Operational Research Society* (1 paper), *Mathematical Problems in Engineering* (3 papers), *Frontiers of Information Technology & Electronic Engineering* (1 paper), *Scientia Iranica* (1 paper), *Communications in Statistics - Theory and Methods* (1 paper).

2015 年總計審查 324 篇論文，其中 170 篇為 SCI/SSCI 期刊文章。

- *IEEE Transactions on Evolutionary Computation* (1 paper), *Applied Energy* (17 papers), *IEEE Transactions on Cybernetics* (1 paper), *IEEE Transactions on Neural Networks and Learning Systems* (3 papers), *Energy* (4 papers), *Information Sciences* (8 papers), *IEEE Transactions on Power Systems* (6 papers), *Nonlinear Dynamics* (3 papers), *Applied Soft Computing* (19 papers), *International Journal of Production Economics* (1 paper), *Decision Support Systems* (3 papers), *Neurocomputing* (27 papers), *Energies* (4 papers), *International Journal of Intelligent Systems* (1 paper), *Sensors* (1 paper), *Journal of Energy Engineering* (3 papers), *Computers and Electronics in Agriculture* (1 paper), *Entropy* (3 papers), *Measurement* (2 papers), *Current Issues in Tourism* (2 papers), *Soft Computing* (38 papers), *IEEE Transactions on Systems, Man, and Cybernetics: Systems* (1 paper), *Neural Computing & Applications* (1 paper), *International Journal of Bio-Inspired Computation* (1 paper), *Journal of the Operational Research Society* (1 paper), *International Journal of Information Technology & Decision Making* (1 paper), *Advances*

in Meteorology (1 paper), *International Journal of Fuzzy Systems* (10 papers), *Scientia Iranica* (1 paper), *Advances in Mechanical Engineering* (2 papers), *Journal of Zhejiang University Science C (Computers & Electronics)* (1 paper).

2014 年總計審查 266 篇論文，其中 126 篇為 SCI/SSCI 期刊文章。

- *Renewable & Sustainable Energy Reviews* (1 paper), *Applied Energy* (14 papers), *Energy* (2 papers), *IEEE Transactions on Neural Networks and Learning Systems* (3 papers), *Information Sciences* (3 papers), *IEEE Transactions on Cybernetics* (1 paper), *Nonlinear Dynamics* (5 papers), *IEEE Transactions on Power Systems* (10 papers), *Applied Soft Computing* (2 papers), *IEEE Transactions on Intelligent Transportation Systems* (1 paper), *Decision Support Systems* (1 paper), *Applied Mathematical Modelling* (2 papers), *Expert Systems with Applications* (3 papers), *Neurocomputing* (13 papers), *Energies* (4 papers), *Computers & Industrial Engineering* (1 paper), *Computers and Electronics in Agriculture* (1 paper), *IEEE Transactions on Systems, Man, and Cybernetics: Systems* (1 paper), *Neural Computing & Applications* (3 papers), *International Journal of Information Technology & Decision Making* (1 paper), *IET Generation Transmission & Distribution* (1 paper), *Journal of Energy Engineering* (2 papers), *Soft Computing* (34 papers), *Environmental Engineering and Management Journal* (2 papers), *International Journal of Uncertainty Fuzziness and Knowledge-Based Systems* (1 paper), *Current Issues in Tourism* (1 paper), *Discrete Dynamics in Nature and Society* (1 paper), *Central European Journal of Operations Research* (3 papers), *Economic Modelling* (1 paper), *Symmetry* (1 paper), *International Journal of Distributed Sensor Networks* (1 paper), *Advances in Mechanical Engineering* (2 papers).

2013 年總計審查 259 篇論文，其中 135 篇為 SCI/SSCI 期刊文章。

- *Applied Energy* (4 papers), *Energy* (2 papers), *IEEE Transactions on Power Systems* (3 papers), *Transportation Research Part C: Emerging Technologies* (2 papers), *Applied Soft Computing* (9 papers), *Nonlinear Dynamics* (6 papers), *IEEE Transactions on Systems, Man, and Cybernetics: Systems* (1 paper), *Applied Mathematical Modelling* (1 paper), *Decision Support Systems* (2 papers), *Neurocomputing* (28 papers), *Computers & Mathematics with Applications* (1 paper), *Expert Systems with Applications* (1 paper), *Energies* (1 paper), *Soft Computing* (42 papers), *Abstract and Applied Analysis* (1 paper), *Neural Processing Letters* (1 paper), *The Scientific World Journal* (14 papers), *Current Issues in Tourism* (4 papers), *IET Intelligent Transport Systems* (2 papers), *Journal of the Operational Research Society* (1 paper), *Journal of Mountain Science* (1 paper), *Journal of Zhejiang University Science C (Computers & Electronics)* (1 paper).

2012 年總計審查 217 篇論文，其中 83 篇為 SCI/SSCI 期刊文章。

- *IEEE Transactions on Neural Networks* (1 paper), *International Journal of Electrical Power & Energy Systems* (5 papers), *Technological and Economic Development of Economy* (1 paper), *Nonlinear Dynamics* (2 papers), *IEEE Transactions on Power Systems* (5 papers), *Tourism Management* (1 paper), *IEEE Transactions on Systems, Man, and*

Cybernetics--Part C: Applications and Reviews (3 papers), *Applied Soft Computing* (10 papers), *International Journal of Production Economics* (1 paper), *Energies* (2 papers), *Applied Mathematical Modelling* (1 paper), *Neurocomputing* (17 papers), *Mathematical Problems in Engineering* (2 papers; 36 special issue proposals), *Current Issues in Tourism* (2 papers), *Neural Processing Letters* (1 paper), *Neural Computing & Applications* (2 papers), *Soft Computing* (19 papers), *Environmental Engineering and Management Journal* (2 papers), *IET Intelligent Transport Systems* (1 paper), *Journal of Hospitality & Tourism Research* (1 paper), *Journal of Mountain Science* (1 paper), *Economic Modelling* (2 papers).

2011 年總計審查 160 篇論文，其中 74 篇為 SCI/SSCI 期刊文章。

- *International Journal of Neural Systems* (3 papers), *IEEE Transactions on Evolutionary Computation* (2 papers), *IEEE Transactions on Neural Networks* (2 papers), *IEEE Transactions on Power Systems* (8 papers), *Applied Soft Computing* (27 papers), *International Journal of Electrical Power & Energy Systems* (5 papers), *IEEE Transactions on Systems, Man, and Cybernetics--Part C: Applications and Reviews* (1 paper), *Soft Computing* (5 papers), *Computers and Electronics in Agriculture* (1 paper), *Neurocomputing* (16 papers), *Abstract and Applied Analysis* (1 paper), *Environmental Engineering and Management Journal* (1 paper), *Measurement* (1 paper), *Mathematical Problems in Engineering* (3 special issue proposals), *Neural Computing & Applications* (1 paper).

2010 年總計審查 150 篇論文，其中 76 篇為 SCI/SSCI 期刊文章。

- *IEEE Transactions on Evolutionary Computation* (3 papers), *Tourism Management* (2 papers), *IEEE Transactions on Systems, Man, and Cybernetics--Part C: Applications and Reviews* (2 papers), *Applied Soft Computing* (36 papers), *International Journal of Electrical Power and Energy Systems* (1 paper), *IEEE Transactions on Power Systems* (8 papers), *Computers and Mathematics with Applications* (2 papers), *Neurocomputing* (11 papers), *Journal of Scheduling* (1 paper), *IEEE Transactions on Power Delivery* (5 papers), *Energies* (2 papers), *Journal of Travel & Tourism Marketing* (3 papers), *Mathematical Problems in Engineering* (2 papers).

2009 年總計審查 105 篇論文，其中 45 篇為 SCI/SSCI 期刊文章。

- *IEEE Transactions on Evolutionary Computation* (4 papers), *Water Resources Research* (1 paper), *IEEE Transactions on Systems, Man, and Cybernetics--Part C: Applications and Reviews* (1 paper), *IEEE Transactions on Power Systems* (4 papers), *Tourism Management* (2 papers), *International Journal of Electrical Power and Energy Systems* (7 papers), *Neurocomputing* (16 papers), *Energy Sources, Part B: Economics, Planning, and Policy* (2 papers), *Soft Computing* (2 papers), *IEEE Transactions on Power Delivery* (2 papers), *International Journal of Forecasting* (2 papers), *Optimization and Engineering* (1 paper), *Journal of Information Science and Engineering* (1 paper).

2008 年總計審查 78 篇論文，其中 14 篇為 SCI/SSCI 期刊文章。

- *International Journal of Forecasting* (1 paper), *IEEE Transactions on Systems, Man, and Cybernetics--Part C: Applications and Reviews* (1 paper), *Tourism Management* (1 paper), *Neurocomputing* (5 papers), *Advances in Engineering Software* (1 paper), *Optimization and Engineering* (1 paper), *International Journal of Neural Systems* (1 paper), *International Journal of Electrical Power and Energy Systems* (1 paper), *Journal of Information Science and Engineering* (1 paper), *Current Issues in Tourism* (1 paper).

2007 年總計審查 25 篇論文，其中 5 篇為 SCI/SSCI 期刊文章。

- *IEEE Transactions on Evolutionary Computation* (1 paper), *Applied Intelligence* (2 papers), *Tourism Management* (1 paper), *International Journal of Neural Systems* (1 paper).