

Associate Professor Bai, Li Ping

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Academic Qualification:

Ph.D. in Industry engineering, Guangdong University of Technology, 2010

Master in Mechatronics engineering, Shenyang Institute of Automation, Chinese Academy of Sciences, 2000

Bachelor in Mechanical engineering, Northeastern University, 1995

Teaching Area

Industry Engineering, Operations Research, Production Planning and Control, Information system, E-Commerce

Research Area

Production planning and scheduling, Discrete event system, Petri net, building energy saving, Intelligent Traffic System

Working Experience

Associate Professor, Faculty of Innovation Engineering, MUST, 2022 - present

Associate Professor, Faculty of Information Technology, MUST, 2013 - 2022

Associate professor, Department of Industrial Engineering, Guangdong University of Technology, 2007 - 2013

Lecturer, Department of Industrial Engineering, Guangdong University of Technology, 2003 - 2007

Assistant engineer, Shenyang Transformer Co.,Ltd, 1995-1997

Research Grants

“複雜製造裝備和生產系統控制與調度新技術” 與2016年獲澳門科學技術發明三等獎，排名第三。

“製造系統的Petri網建模、控制和運行優化”於2010年獲廣東省科學技術獎（基礎研究類）一等獎，排名第四。

Representative publications (Complete publication refer to my webpage)

Longqing zhang, Liping Bai; XinWei Zhang; Lei Yang, Multi-Factor Indicator of CHIC Intelligent Lighting System with Personal in the Office, Applied Soft Computing Journal, <https://doi.org/10.1007/s11227-021-04289-z>.

WenQing Xiong, Yan Qiao, LiPing Bai, Mohammadhossein Ghahramani, NaiQi Wu, and PinHui Hsieh, Wafer Reflectance Prediction for Complex Etching Process Based on K-Means Clustering and Neural Network, IEEE transactions on semiconductor manufacturing, Vol. 34, no. 2, 207 – 216, 2021 .

- L.Q. Zhang, L. P. Bai, X. W. Zhang, Y. H. Zhang, F. Sun, C. C Chen, Comparative variance and Multiple Imputation Used for Missing Values in Land Price DataSet, *Computers, Materials & Continua*, vol. 61, no.3, 1175 – 1187, 2019.
- L.Q. Zhang, L. P. Bai, X. W. Zhang, Y. H. Zhang, Y. L, X. D. Yan, Cultivated land monitoring system based on dynamic wake-up UAV and wireless of distributed storage, *Computers, Materials & Continua*, vol. 61, no.2. 817 – 828. 2019.
- L. P. Bai, N. Q. Wu, Z. W. Li and M. C. Zhou, Optimal One-wafer Cyclic Scheduling and buffer space configuration for single-arm multi-cluster tools with linear topology, *IEEE Transactions on Systems, Man, & Cybernetics*, 2016, 46(10):1456-1467.
- N. Q. Wu, L. P. Bai, and M. C. Zhou, An Efficient Scheduling Method for Crude Oil Operations in Refinery With Crude Oil Type Mixing Requirements, *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, vol. 46, no.3, 413 – 426, 2016.
- N. Q. Wu, M. C. Zhou, L. P. Bai, Short-term scheduling of crude oil operations in refinery with high fusion point oil and two transportation pipelines, *Enterprise Information Systems*, Vol. 10, No. 6, 581–610, 2016
- N. Q. Wu, L. P. Bai, M. C. Zhou, F. Chu, and S. Mammam, A novel approach to optimization of refining schedules for crude oil operations in refinery, *IEEE Transactions on Systems, Man, & Cybernetics, Part C*, vol. 42, no. 6, 1042-1053, 2012.
- Y. Qiao, N. Q. Wu, Q. H. Zhu, and L. P. Bai, Cycle Time Analysis of Dual-Arm Cluster Tools for Wafer Fabrication Processes with Multiple Wafer Revisiting Times, *Computers & Operations Research*, accepted.
- L. P. Bai and N. Q. Wu, Short-term scheduling of crude oil operations and its complexity. *Industrial engineering Journal*, vol. 14, no. 1,67-71, 2011.
- N. Q. Wu, L. P. Bai, and C. B. Chu, Modeling and conflict detection of crude-oil operations for refinery process based on controlled-colored-timed Petri net, *IEEE Transactions on Systems, Man, & Cybernetics, Part C*, vol. 37, no. 4, 461-472, 2007.
- L. P. Bai and N. Q. Wu, Performance analysis of cluster tool with revisiting in semiconductor manufacturing. *Computer Integrated Manufacturing Systems*, vol.11, no.3, 320-325, 2005.
- L. P. Bai and N. Q. Wu, Performance analysis of cluster tool with Non-Revisiting in semiconductor manufacturing. *Systems engineering theory and practice*. vol.25, no.6, 11-18, 2005
- N. Q. Wu and L. P. Bai, A review of scheduling optimization in petroleum refining industry. *Computer Integrated Manufacturing Systems*, vol.11, no.1, 90-96, 2005.

Professional Certification and Awards

Journal Editorship

Personal Website