Associate Professor Li Ping Bai

Department of Engineering Science, Faculty of Innovation Engineering
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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

2016

Petri   –   2010

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. Mammar, 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 WaferFabrication 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