Macau University of Science and Technology
Faculty of Innovation Engineering
Department of Engineering Science
Macao Institute of Systems Engineering

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Academic Qualification

Ph. D. in Systems Engineering, Xi'an Jiaotong University, Xi'an, China, 1988.

M. S. in Systems Engineering, Xi'an Jiaotong University, Xi'an, China, 1985.

B. S. in Electrical Engineering, Anhui University of Technology, Huainan, China, 1982.

Teaching Area

Algorithm theory

Operations research and optimization

Automation, Electric motor and drive

Research Area

Intelligent manufacturing

Discrete event systems, and Petri net theory and applications

Production planning, scheduling and cont

- : Shenyang Institute of Automation, Chinese Academy of Sciences, Shenyang,
- P. R. China, Associate Professor.
- : School of Industrial Engineering, Purdue University, West Lafayette, Indiana, USA, Visiting Scholar.
- : Shenyang Institute of Automation, Chinese Academy of Sciences, Shenyang,
- P. R. China, Assistant Professor.

Research Grants

Operational Optimization and Control of Cluster Tools with Multiple Chamber Configuration in a Process Module for Wafer Fabrication, FDCT.

Self-Learning Optimal Control of City Energy Management System Based on Edge Computing, FDCT.

Optimal Scheduling and Control of Cluster Tools for Wafer Fabrication with Strict Process Constraints in Semiconductor Manufacturing, FDCT.

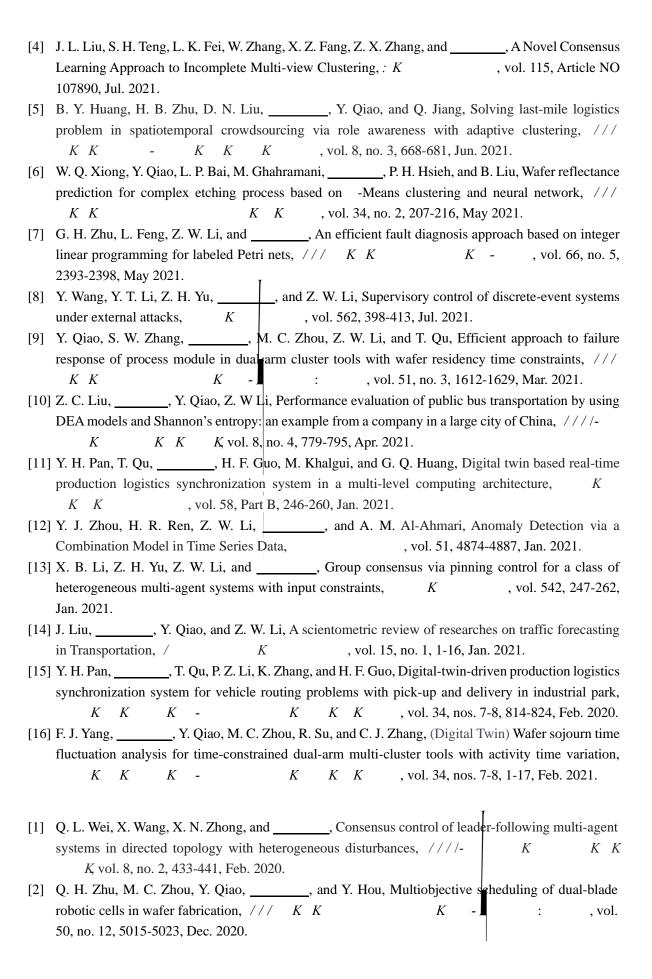
Maximally Permissive Supervisory Control of Resource Allocation Systems Based on Resource-Oriented Petri Nets, FDCT.

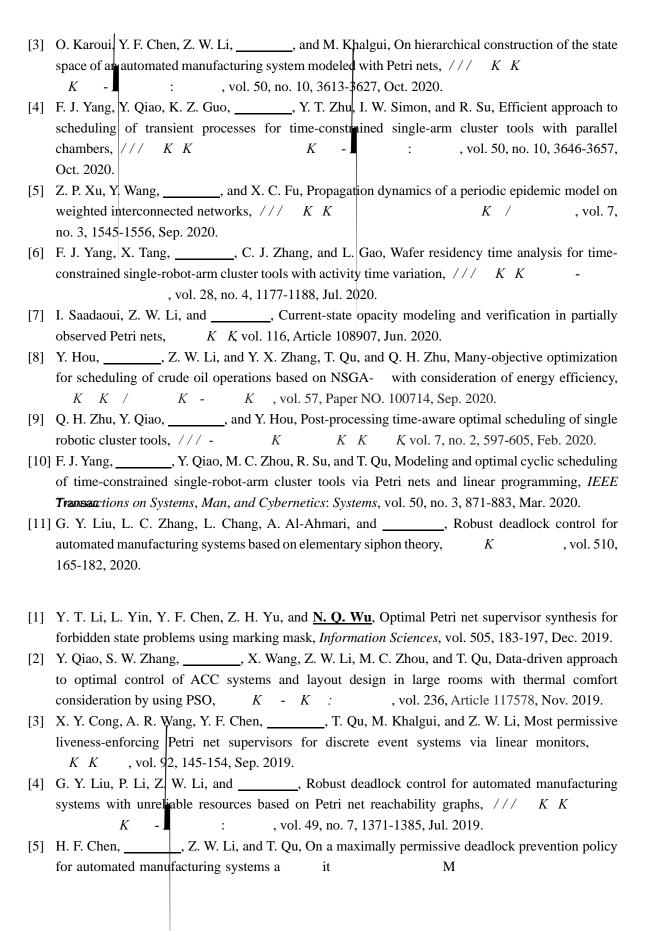
Short-Term Scheduling Optimization for Continuous Process Industry by Using Hybrid System Control Theory, FDCT.

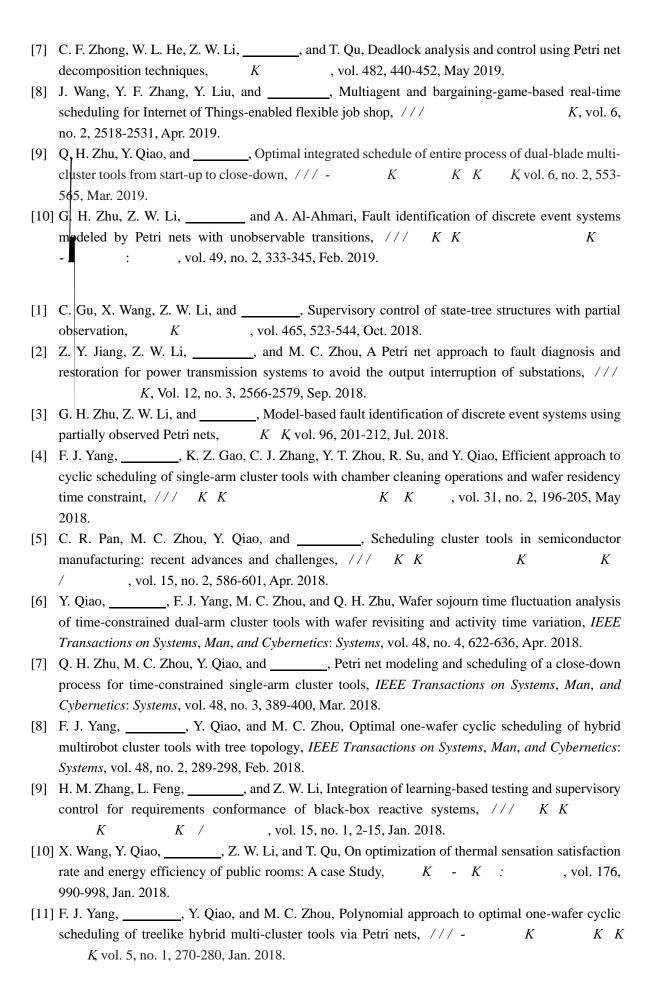
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Representative publications (Complete publication refer to my webpage)	
F 4 3	;
[1]	and M. C. Zhou, K : , CRC
	Press, Taylor & Francis Group, New York, October 2009.
[2]	and M. C. Zhou, Resource-oriented Petri nets in deadlock prevention and avoidance, in M.
	C. Zhou and M. P. Fanti (Ed.),. K - K , Marcel Dekker,
	NY, January 2005.
[3]	and M. C. Zhou, A resource-oriented Petri net approach to scheduling and control of time-
	constrained cluster tools in semiconductor fabrication, in Z. W. Li and A. M. Al-Ahmari (Ed.), θ K
	K K , IGI Global, New York, May, 2013.
[4]	Y. Qiao,, and M. C. Zhou, Real-time scheduling and control of single-arm cluster tools
	with residency time constraint and activity time variation by using resource-oriented Petri nets, in Z.
	W. Li and A. M. Al-Ahmari (Ed.), θ K K K K , IGI
	Global, New York, May, 2013.
[5]	, M. C. Zhou, F. Chu, and S. Mammar, Modeling and scheduling of crude oil operations in
	refinery: a hybrid timed Petri net approach, in M. Khalgui, O. Mosbahi, and A. Valentini (Ed),
	/ : K , K , K . , IGI Global, New
	York, May 2013.
[6]	, M. C. Zhou, F. Chu, and S. Mammar, Modeling, Analysis, Scheduling and Control of
	Cluster Tools in Semiconductor Fabrication, in - K
	, Edited by M. C. Zhou, HX. Li and M. Weijnen, Wiley/IEEE Press, Hoboken, NJ, pp.
	289-315, 2015.
	20, 515, 2015.
	:
[1]	, Y. Qiao, Z. W. Li, A. Al-Ahmari, A. El-Tamimi, and H. Kaid, A novel control-theory-base

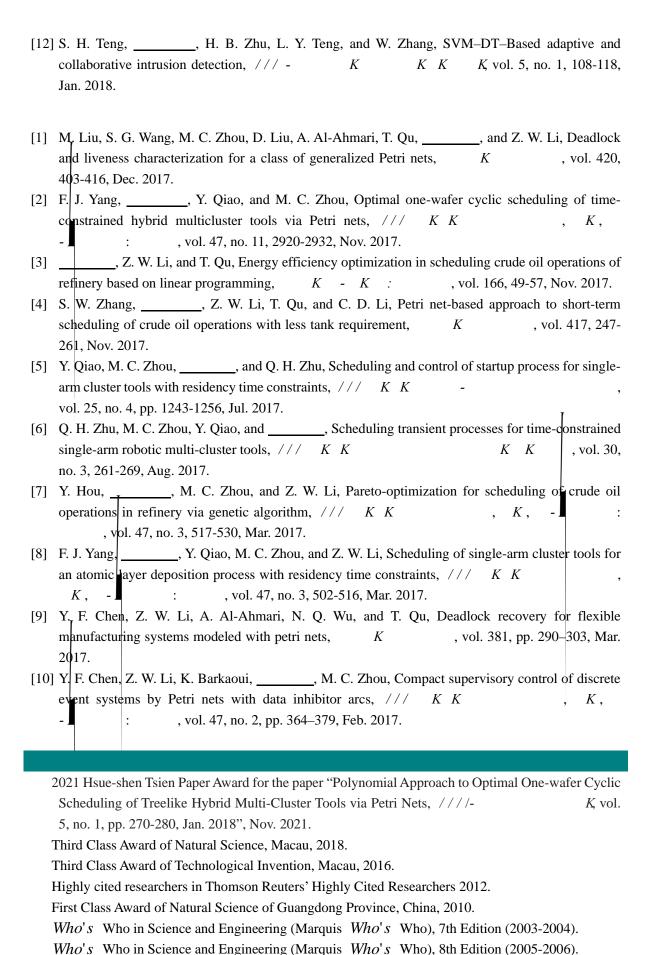
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Who's Who in the World (Marquis *Who's* Who), 8th Edition (2007-2008).

2011 QSI Best Application Paper Award Finalist, for the paper "Modeling and Analysis of Dual-Arm Cluster Tools for Wafer Fabrication with Revisiting," by Y. Qiao, N. Wu, and M. C. Zhou,