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 a edul ion planning, scł scre 1/4

- : 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.

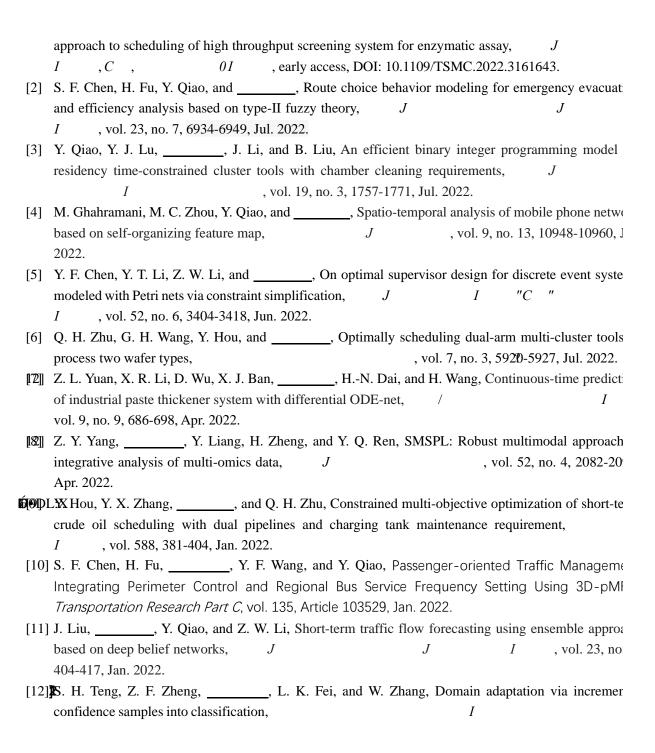
Self-Learning Optimal Control of City Energy Management System Based on Edge Computing, FDCT.

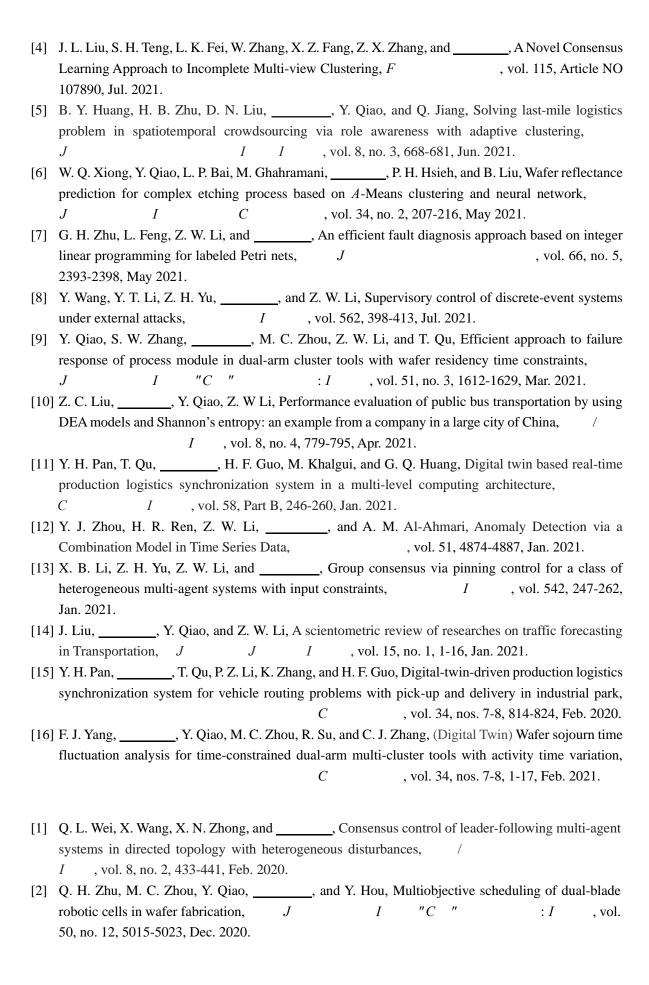
Optimal Scheduling and Control of Cluster Tools for Wafer Fabrication with Strict Process Constraints in Semiconductor Manufacturing, FDCT.

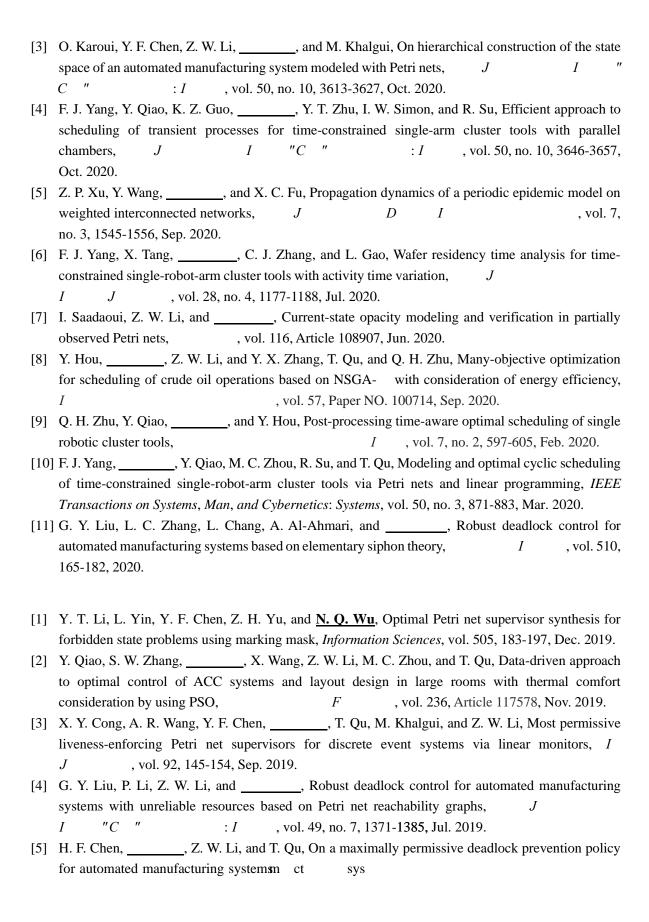
Maximally Permissive Supervisory Control of Resource Allocation Systems Based on Resource-Oriented Petri Nets, FDCT.

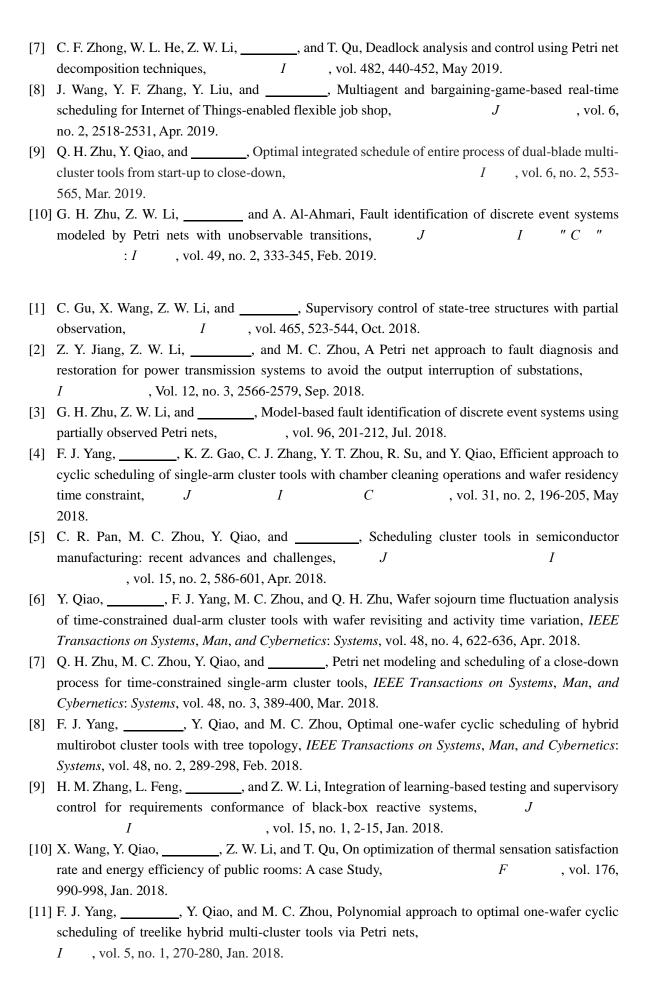
Short-Term Scheduling Optimization for Continuous Process Industry by Using Hybrid System Control Theory, FDCT.

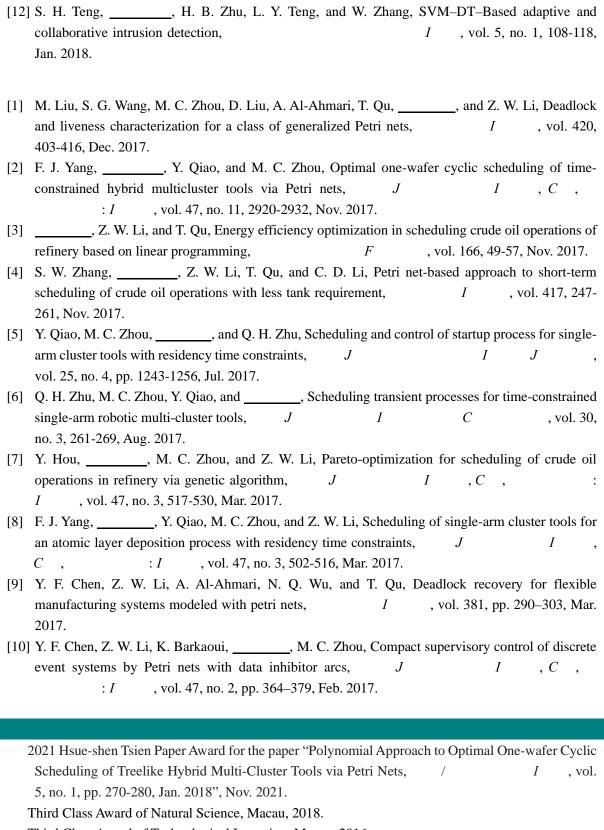
D and	ansantativa nukliastiana (Camplata nukliastian nafanta nu unknaas)
Representative publications (Complete publication refer to my webpage)	
[1]	and M. C. Zhou, I F, CRC
	Press, Taylor & Francis Group, New York, October 2009.
[2]	and M. C. Zhou, Resource-oriented Petri nets in deadlock prevention and avoidance, in M.
	C. Zhou and M. P. Fanti (Ed.),: I , 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.),
	C C I θ , 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.), C C I θ , 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),
	I : , E , igl 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 I I
	, Edited by M. C. Zhou, HX. Li and M. Weijnen, Wiley/IEEE Press, Hoboken, NJ, pp.
	289-315, 2015.
	:
[1]	, Y. Qiao, Z. W. Li, A. Al-Ahmari, A. El-Tamimi, and H. Kaid, A novel control-theory-bas











Third Class Award of Technological Invention, Macau, 2016.

Highly cited researchers in Thomson Reuters' Highly Cited Researchers 2012.

First Class Award of Natural Science of Guangdong Province, China, 2010.

Who's Who in Science and Engineering (Marquis Who's Who), 7th Edition (2003-2004).

Who's Who in Science and Engineering (Marquis Who's Who), 8th Edition (2005-2006).

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, &

I , Trieste, Italy, August 24 - 27,

2011.

Best student paper award, for the paper "Real-time control policy for single-arm cluster tools with residency time constraints and activity time variation by using Petri net," By Y. Qiao, N. Q. Wu, and M. C. Zhou, 2012 D " I , Beijing, China, April 11-13, 2012.

Associate Editor: Information Sciences, 2017-

Associate Editor: IEEE/CAA Journal of Automatica Sinica, 2015-2018.

Associate Editor: IEEE Transactions on Systems, Man, & Cybernetics, Part C, 2007-2012. Associate Editor: IEEE Transactions on Automation Science and Engineering, 2009-2012.

Editor in Chief: Industrial Engineering Journal, 2009-2014.

Associate Editor: IEEE Transactions on Systems, Man, & Cybernetics: Systems, 2013-2016.