

# Publications

Cheng-Hung Wu  
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## Selected Journal Publications

1. Cheng-Hung Wu\*, Wen-Chi Chien, and James T. Lin, “Dynamic Production Control in Parallel Processing Systems under Process Queue Time Constrains”, *Computers and Industrial Engineering*, accepted 2011. (NSC97-2221-E-002-154-MY3 補助) (SCI)  
**2010 Impact Factor: 1.543, Rank Factor: 12/38** ( in Engineering, Industrial)
2. Chen-Fu Chien, Cheng-Hung Wu\*, and Yu-Shian Chiang, “Coordinated Capacity Migration and Expansion Planning for Semiconductor Manufacturing under Demand Uncertainties”, *International Journal of Production Economics*, accepted 2011. (SCI)  
**2010 Impact Factor: 1.988 , Rank Factor: 3/38** ( in Engineering, Industrial)
3. Cheng-Hung Wu\* and Ya-Tang Chuang, “An Efficient Algorithm for Stochastic Capacity Portfolio Planning Problems”, *Journal of Intelligent Manufacturing*, accepted 2011. (NSC97-2221-E-002-154-MY3 補助) (SCI)  
**2010 Impact Factor: 1.081, Rank Factor: 15/38** ( in Engineering, Manufacturing)
4. James T. Lin, Cheng-Hung Wu\*, Tzu-Li Chen and Shin-Hui Shih, “A Stochastic Programming Model for Strategic Capacity Planning in Thin Film Transistor-Liquid Crystal Display (TFT-LCD) Industry”, *Computers and Operations Research*, Vol. 38(7), 992-1007, 2011. (NSC97-2221-E-002-154-MY3 補助) (SCI)  
**2010 Impact Factor: 1.769, Rank Factor: 6/38** ( in Engineering, Industrial)
5. Hua-Hsuan Wu, Cheng-Hung Wu\*, and James T. Lin, “Dynamic Selling of Quality-graded Products under Demand Uncertainties”, *Computers and Industrial Engineering*, Vol. 61(1), 141–149, 2011. (SCI)  
**2010 Impact Factor: 1.543, Rank Factor: 12/38** ( in Engineering, Industrial)
6. Cheng-Hung Wu\* and Ya-Tang Chuang, "An Innovative Approach for Strategic Capacity Portfolio Planning under Uncertainties", *European Journal of Operational Research*, Vol. 207(1), 1002–1013, 2010. (NSC98-2221-E-002-039 and NSC96-3114-P-002-012- Y 補助) (SCI)  
**2010 Impact Factor: 2.159, Rank Factor: 6/75** ( in OR & MS)
7. Cheng-Hung Wu\*, James T. Lin, and Wen-Chih Chien, "Dynamic Production Control in a Serial Line with Process Queue Time Constraint", *International Journal of Production Research*, Vol. 48(13), 3823–3843, 2010. (NSC97-2221-E-002-154-MY3 補助) (SCI)  
**2010 Impact Factor: 1.033, Rank Factor: 17/38** ( in Engineering, Manufacturing)
8. Cheng-Hung Wu\*, James T. Lin and Hua-Hsuan Wu, “Robust Production and Transportation Planning in Thin Film Transistor-Liquid Crystal Display (TFT-LCD) Industry under Demand and Price Uncertainties”, *International Journal of Production Research*, Vol. 48(20), 6037–6060, 2010. (NSC97-2221-E-002-154-MY3 and NSC96-3114-P-002- 012-Y 補助) (SCI)  
**2010 Impact Factor: 1.033, Rank Factor: 17/38** ( in Engineering, Manufacturing)
9. James T. Lin, I-Hsuan Hong, Cheng-Hung Wu and Kai-Sheng Wang, “A Model for Batch Available-to-promise in Order Fulfillment Processes for TFT-LCD Production Chains”, *Computers and Industrial Engineering*, Vol. 59(4), 720–729, 2010. (SCI)  
**2010 Impact Factor: 1.543, Rank Factor: 12/38** ( in Engineering, Industrial)

10. Cheng-Hung Wu\* and Yu-Ching Cheng, “Production Control under Processes Queue Time Constraints – A Case Study in Semiconductor Manufacturing”, *Automation Quarterly*, Sep. 2010, in Chinese. (NSC97-2221-E-002-154-MY3補助)
11. Cheng-Hung Wu, Douglas Down and Mark E. Lewis, “Heuristics for Allocation of Reconfigurable Resources in a Serial Line with Reliability Considerations”, *IIE Transactions*, Vol. 40(6), 595–611, 2008. (NSC96-2221-E-002-315補助) (SCI)  
**2010 Impact Factor: 1.186, Rank Factor: 20/75** ( in OR&MS)
12. Cheng-Hung Wu, Mark E. Lewis and Michael Veatch, “Dynamic Allocation of Reconfigurable Resources in a Two-Stage Tandem Queueing System with Reliability Considerations”, *IEEE Transactions on Automatic Control*, Vol. 51(2), 309–314, 2006. (SCI)  
**2010 Impact Factor: 1.952, Rank Factor: 9/60** ( in Automation & Control Systems)

### Dissertation

Cheng-Hung Wu, “Flexible Resource Allocation in Complex Processing Networks with Reliability Considerations”, Industrial and Operations Engineering, 2006, University of Michigan - Ann Arbor

### International Conference Proceedings and Presentations

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|------|------|--|
| Jan. | 2011 | <u>Cheng-Hung Wu</u> and Andrea H. Chiu, “Dynamic Capacity Planning under Centralized and Decentralized Pricing Decisions”, The Second POMS-HK International Conference, Hong Kong.  |
| Jan. | 2011 | <u>Cheng-Hung Wu</u> , Wen-Chih Chien, and Yu-Ching Cheng, “Dynamic Production Control under Queue Time Constraints”, The Second POMS-HK International Conference, Hong Kong.  |
| Dec. | 2010 | <u>Cheng-Hung Wu</u> , Iris Chia-Yu Chang, and Chiao-Ru Hung, “Dynamic Demand Differentiation for Health Care Service under Uncertainties”, International Conference on Mass Customization and Personalization, Taipei, Taiwan.  |
| Jul. | 2010 | <u>Cheng-Hung Wu</u> and Ya-Tang Chuang, “Dynamic Multi- Generation Capacity Planning under Uncertainties”, The 40 <sup>th</sup> International Conference on Computers and Industrial Engineering, Awaji, Japan.   |
| Feb. | 2010 | <u>Cheng-Hung Wu</u> and Ya-Tang Chuang, “An Efficient Dynamic Programming Algorithm for Multiple Generation Capacity Planning”, The 6th International Conference on Intelligent manufacturing & Logistics Systems, Hsinchu, Taiwan.   |
| Feb. | 2010 | <u>Cheng-Hung Wu</u> , Hung-Chen Chiu, and I-Ling Lee, “Stochastic Dynamic Capacity Planning under Price Discrimination”, The 6th International Conference on Intelligent manufacturing & Logistics Systems, Hsinchu, Taiwan.  |
| Jul. | 2009 | <u>Cheng-Hung Wu</u> and Ya-Tang Chuang, “An Innovative Approach for Strategic Capacity Portfolio Planning under Uncertainties”, The 15 <sup>th</sup> INFORMS Applied Probability Conference, 2009, Ithaca, NY, USA.   |
| Aug. | 2008 | <u>Cheng-Hung Wu</u> and Ya-Tang Chuang, “Portfolio Optimization of Multi- Generation Capacity under Demand and Price Uncertainties”, The 4 <sup>th</sup> Sino-Japanese Optimization Meeting, 2008, Tainan, Taiwan   |
| May  | 2008 | <u>Cheng-Hung Wu</u> , Hua-Hsuan Wu, and James T. Lin, “Production and Transportation Planning in a Thin Film Transistor Liquid Crystal Display (TFT-LCD) Product Chain”, IIE Annual Conference and Expo, IERC 2008, Vancouver, Canada   |
| May  | 2008 | Wen-Chi Chien, <u>Cheng-Hung Wu</u> , and James T. Lin, “Optimal Admission Control in Tandem Queueing Systems with Queue Time Constraint Considerations”, IIE Annual Conference and Expo, IERC 2008, Vancouver, Canada (Invited Session Chair: Production Planning and Scheduling II), |
| Dec. | 2007 | <u>Cheng-Hung Wu</u> , Hua-Hsuan Wu, “A Robust Optimization Approach for Production and Transportation Control in Thin Film Transistor Liquid Crystal Display (TFT-LCD)  |

- Industry”, The 8<sup>th</sup> Asia Pacific Industrial Engineering & Management System(APIEMS 2007), Kaohsiung, Taiwan, (refereed)
- Dec. 2007 James T. Lin, Cheng-Hung Wu, Tzu-Li Chen, and Yi -Ching Chang, “A Stochastic Programming Model for Strategic Capacity Planning in TFT-LCD Production Chain”, The 8<sup>th</sup> Asia Pacific Industrial Engineering & Management System(APIEMS 2007), Kaohsiung, Taiwan
- Oct. 2007 James T. Lin, Kai-Sheng Wang, I-Hsuan Hong, Cheng-Hung Wu, “An available-to-promise (ATP) model for TFT-LCD production chain”, The 14th International Conference on Industrial Engineering and Engineering Management (IE&EM’07), Tianjin, China
- Nov. 2006 Cheng-Hung Wu, Douglas Down, and Mark E. Lewis, “Heuristics for Resource Allocation in a Serial Line with Reliability Considerations”, INFORMS Annual Meeting, Pittsburgh, United States (invited)
- Jul. 2006 Mark E. Lewis and Cheng-Hung Wu, “Flexible Resource Allocation in Complex Processing Networks with Reliability Considerations”, 2006 NSF Design, Service, and Manufacturing Grantees and Research Conference, St. Louis, Missouri, United States (invited)
- Nov. 2005 Mark E. Lewis and Cheng-Hung Wu, "Dynamic Allocation of Flexible Resources in a Serial Line with Reliability Considerations", INFORMS Annual Meeting, San Francisco, United States (invited)
- Jul. 2005 Mark E. Lewis, Cheng-Hung Wu and Michael Veatch, "Dynamic Allocation of Reconfigurable Resources with Reliability Considerations", Thirteenth INFORMS Applied Probability Conference, Ottawa, Canada
- Apr. 2005 Cheng-Hung Wu and Mark E. Lewis “Dynamic Part Re-routing and Scheduling with Reliability Considerations”, ERC TAC meeting, Michigan, United States
- Oct. 2004 Cheng-Hung Wu and Mark E. Lewis, "Dynamic Resources Allocation in a Tandem Queueing with Reliability Considerations”, INFORMS Annual Meeting, Denver, Colorado, United States (invited)
- Oct. 2004 Cheng-Hung Wu and Mark E. Lewis “Dynamic Resources Allocation in a Tandem Queueing System with Server Configuration Costs”, ERC TAC meeting, Michigan, United States
- Oct. 2003 Cheng-Hung Wu and Mark E. Lewis “Reconfigurable Resources Allocation in Tandem Queueing Systems”, ERC TAC meeting, Michigan, United States

### Domestic Conference Proceedings and Presentation

- Dec. 2010 吳政鴻、林伯昕, “醫療服務之動態顧客組合管理”, 工業工程學會年會, 台南
- Dec. 2010 吳政鴻、林友梅, “考慮客戶自有產能之供應契約設計”, 工業工程學會年會, 台南
- Dec. 2010 吳政鴻、曾俊翔, “考慮客戶自有產能之供應契約設計”, 工業工程學會年會, 台南
- Nov. 2010 吳政鴻, “差異定價下寡佔市場之多世代產能與技術投資策略研究(I)”, 國科會工業工程學門 98 年度成果發表會, 台北
- Oct. 2010 吳政鴻, “多功能設備之動態配置與預防保養整合研究”, 國科會自動化學門 98 年度成果發表會, 基隆
- Dec. 2009 郭嘉茵、吳政鴻, “雙占產業之產能與技術策略研究”, 工業工程學會年會, 台中
- Dec. 2009 吳政鴻、錢文祺、鄭又精, “作業等待時間限制下串聯式生產系統最佳控制”, 工業工程學會年會, 台中
- Nov. 2009 吳驊軒、吳政鴻, “多品質等級產品之動態銷售策略研究”, 作業研究理論與實務學術研討會, 新竹
- Nov. 2009 莊雅棠、吳政鴻, “考慮需求與價格不確定之多世代產能組態最佳化研究”, 作業研究理論與實務學術研討會, 新竹
- Oct. 2009 吳政鴻, “多功能設備之動態配置與預防保養整合研究”, 國科會自動化學門 97 年度成果發表會, 台南
- Dec. 2008 Cheng-Hung Wu, James T. Lin and Wen-Chih Chien, “Optimal Admission Control in Tandem Queueing Systems with Process Queue Time Constraint”, CIIE Annual Meeting,

2008, Taoyuan, Taiwan.

- Jan. 2008 吳政鴻、林則孟、錢文祺、黃志偉, “串聯等候時間限制製程之允入決策控制研究”, 決策分析研討會 - DA Symposium 2008, 桃園
- Jan. 2008 吳政鴻、林則孟、黃志偉、錢文祺, “自動化物料搬運系統之動態車數決策—以半導體產業為例”, 決策分析研討會 - DA Symposium 2008, 桃園