Jia-Yush Yen

Department of Mechanical Engineering, National Taiwan University

No.1 Sec.4 Roosevelt Rd., Taipei, Taiwan 10617, R.O.C.

Fax/vocal: +886-2-3366-2688 (O)

EDUCATION

Doctor of Philosophy in Mechanical Engineering, June 1989

University of California, Berkeley, California U.S.A.

Major Field: Control, Minor Field: Mathematics and Heat Transfer

Master of Science in Mechanical Engineering, December 1983

University of Minnesota, Minneapolis U.S.A.

Major Field: Heat Transfer

Bachelor of Science in Mechanical Engineering, June 1980

National Tsing Hwa University, Shinchu, Taiwan R.O.C.

EXPERIENCES

President		National Taiwan University of Science and Technology	2021/2 – present
Chair Professor	Department of Mechanical Engineering	National Taiwan University of Science and Technology	2021/2 – present
Director	Intelligent Manufacturing Research Center	College of Engineering, National Taiwan University	2018 - present
Director	Research and Development Center for Medical Devices	National Taiwan University	4/2015 - present
President	Chinese Automatic Control Society		2020/1/1 - present
Distinguished Professor	Department of Mechanical Engineering	National Taiwan University	2013 – 2021/1
Dean	College of Engineering	National Taiwan University	8/2011 – 7/2017
Board Member	Complaint Review Board for Government Procurement	Public Construction Commission, Executive Yuan	6/2017 – 5/2018
President	Chinese Institute of Automation Engineers		1/2011 – 12/2016
Secretary General	Institute of Engineering Education Taiwan		8/2011 – 7/2017
Board Director	Tai-Tjing Science and Technology Foundation		8/2011 – 8/2018
Deputy CEO	Stanley Wang d-School	National Taiwan University	5/2015 – 7/2017
Director	Yen Tjing-Ling Industrial Research Institute	National Taiwan University	8/2007 – 7/2011
Chair	Department of Mechanical Engineering	National Taiwan University	8/2004 – 7/2007
Deputy Director	Yen Tjing-Ling Industrial Research Institute	National Taiwan University	8/2001 – 7/2004
Professor	Department of Mechanical Engineering	National Taiwan University	8/1997 - present
Secretary General	Chinese Institute of Automation Engineers		1/2009 – 12/2010
Secretary	Robotic Society of Taiwan		2008 - 2009

General			
Vice Secretary General	Institute of Engineering Education Taiwan		2002 – 2006, 2007 – 2011
Vice Chair	Department of Mechanical Engineering	National Taiwan University	8/1999 – 7/2001
Associate Professor	Department of Mechanical Engineering	National Taiwan University	2/1989 – 7/1999
Board Member	Chinese Society of Mechanical Engineering		2005/1 -
Board Member	Chinese Society of Mechanical Engineering		2005/1 -
Board Member	Chinese Automatic Control Society		2003/1 - present
Board Member	Chinese Institute of Automation Engineering		2005/1 -
Technical Consultant	Public Engineering and Construction Committee	Executive Yuan	2001 – present
Operation Consultant	Taipei Rapid Transit Company		2000, 2001
Pre-revenue Service Review Committee	Metropolitan Rapid Transit Blue Line and Red Line	Taipei City Government	1999/11
Special Contractor	Mechanical Industry Research Laboratory	Industrial Technology Research Institute	99/9 – 00/11
Review Committee	Taipei City Transit System	Department of	96/9 – 01
Review Committee	MRT Chungho line	Department of Rapid Transit	98/11 – 98/12
Consultant	Taipei Rapid Transit Company		12/00 – 12/02
Review Committee	Foreign Exchange Student Scholarship Examine Committee	Minister of Education	2/97
Review Committee	Technical Inspection Committee for Taipei International Airport Transit	National Bureau of High-Speed Railway	1/97 – 6/97
Review Committee	Preliminary Revenue Service Inspection Committee for Taipei Tamshuei Transit Line	Taipei City Government	2/97 – 3/97
Engineering Inspection Committee	Taipei Tamshuei Transit Line	Taipei City Government	1/96 – 4/96
Committee Member	Problem Inspection Committee for Taipei Rapid Transit System,	Taipei City Government	6/96 – present
Special Contractor	Mechanical Research Laboratory,	Industrial Technology Research Institute	7/95 – present
Committee Member	Technical Inspection Committee for Mucha Line Rapid Transit System,	Taipei City Government	2/95 – 4/95
Visiting Associate Professor	Department of Fabrication Engineering	National Taiwan Institute of Technology	2/91 – 7/93
Technical Consultant	Photo-Electric Research Laboratory	Industrial Technology Research Institute	9/89 – 6/93
Teaching Associate	Department of Mechanical Engineering	University of California, Berkeley	
Teaching Assistant	Department of Physics	University of California, Berkeley	
Second Lieutenant		R.O.C. Army	10/80 – 8/82

Major Fields

Mechatronics Systems, Nano-Manipulation and Control, Computer Peripherals

Honors Received

Research Fellow Grant, Ministry of Science and Technologies, Taiwan, (2019-2021).

Outstanding Research Award, National Science Council, Taiwan, (2004-2006), Ministry of Science and Technologies, Taiwan (2016-2018)
Team Chair, Washington Accord Review Team for Engineering Accreditation Council, Board of Engineers Malaysia (2015/8 – 2016/6)
Investigation Committee Member, Taipei MRT Tucheng line, (2015)
Investigation Committee Member, Taipei MRT Hsinyi line, (2015)
Director, Automation Area, National Science Council, Taiwan, (2010 ~ 2012)
Fellow, Robotics Society of Taiwan, (2018)

Fellow, ASME, (2010)
Fellow, Chinese Society of Mechanical Engineering, (2012)
Fellow, Chinese Institute of Automation Engineers, (2009)
Distinguished Professor, National Taiwan University, (2007-2009)
Mining and Metallurgy Paper Award, the Chinese Institute of Mining and Metallurgical Engineering (2008)
Outstanding Contest Award, 2005 CACS Automatic Control Conference. (2005)
Outstand Performance Award, MOE Industry Equipment Positioning Servo Competition, (2005)
Shin-Hwa Technology Award, (2005)
Best Teaching Award, National Taiwan University, (2004)
Research Contribution Award, National Taiwan University, (2004)
Outstanding Engineering Professor, Chinese Society of Mechanical Engineering, (2000)
The Outstanding Paper Award, The Chinese Automatic Control Society, (1998)
The Complements of the Mayor, "Tamsuei Line Rapid Transport Engineering Inspection Team," The City of Taipei. (1996)
The Appreciation for Devotion and Contributioin, "Mucha Line Inspection Team," The City of Taipei. (1995)
IBM Graduate Fellowship, (1984)
Distinguished Army Officer, (R.O.C.) (1982)
ΦΤΦ Phi Tau Phi Scholastic Honor Society, Member, (R.O.C.)
YAMAHA Scholarship, (1979)
New York Chinese Student Association Scholarship, (1978)
Mr. Mei Yueh-Harn Scholarship, (1976, 1977)

Keynote Speeches

- "A Surgeon Co-Working Task Control of Robotic MIS Systems," 2019 IEEE 2nd International Conference

on Mechatronics, Robotics, and Automation (ICMRA), Tianjin University, Tianjin, China, Oct. 12-14, 2019.

- "A Surgeon Co-Working Laparoscope Holder with Screen View Keeping," The 5th International Conference on Control Science and Systems Engineering (ICCSSE 2019), Shanghai Jiao Tong University, Shanghai, China, August 14-16, 2019.
- "Diagnosis of Keratoconus Based on Corneal Dynamic Response," ICMAA 2019, the 3rd International Conference on Mechanical, Aeronautical and Automotive, Chengdu, China, February 23-25, 2019.
- "A Surgeon Co-working Robotic Minimally Invasive Surgery Endoscope Holder Design," The 4th International Conference on Control Science and Systems Engineering (ICCSSE 2018), August 21-23, 2018, Wuhan, China
- "Extracting Corneal Young's Modulus Based on the Intraocular Pressure Measurement," ICMAA 2018, the 2nd International Conference on Mechanical, Aeronautical and Automotive, Singapore, February 24-26, 2018.
- "Access and Positioning Control of a High Precision Single-Deck Dual-Axes Planar Stage," ICCSSE 2017 3rd International Conference on Control Science and Systems Engineering (ICCSSE), Beijing, China August 17-19, 2017.
- "Corneal Biomechanical Analysis and the Clinical Applications," The 6th International Symposium on Advanced Control of Industrial Processes (AdCONIP 2017), Taipei, May 28-31, 2017.
- "Servo Technologies for Ultra-high Precision Positioning Systems," 2016 2nd IEEE International Conference on Control Systems Engineering (ICCSSE 2016), Singapore, July, 27-29, 2016.
- "Toward Creating Actual Environment for Testing - An Example of Silicon Steel Iron Loss Measurements," Asia High Efficiency Metalworking Summit: Green, Smart, Innovative, Pullman Bangkok King Power, Bangkok, Thailand, Aug. 21~22, 2014.
- "Quality Assurance of Cross-Border Higher Education," APQN Quality Assurance and Higher Education Internationalization, Asia-Pacific Quality Network and Fu Jen Catholic University, Taipei, Taiwan, 27th September, 2013.
- "Top Down Nano-manipulation Approach for Printing Continuous Nano-Pattern National Symposium on System Science and Engineering," National Symposium on System Science and Engineering, National Taiwan Ocean University, Keelung, 16~17 June, 2012
- "Stitching Continuous Nano-Patterns on a Roller," Ninth Cross-Straight Conference on Advanced Manufacturing, Sichuan, Emei, China, Oct. 18-19, 2011
- "Some Top Down Approaches to Micro and Macro Scale Nano Fabrication," The 4th International Conference on Positioning Technology, 2010, Paradise hotel, Busan, Korea, Nov. 24-26, 2010
- "Why Engineering Education Accreditation," 2014 FEIAP First Workshop, Yangon, Myanmar, Feb. 15, 2014.
- "FEIAP Guideline and Recent Development in Engineering Education," FEIAP Workshop on Education and Accreditation, Jakarta Convention Centre, Jakarta, Indonesia. November 11, 2013.
- "Introduction to FEIAP Engineering Education Guideline," Inaugural FEIAP Convention 2011, Theme: Engineering Education & Accreditation, 2 - 7 October 2011, Furama Riverfront Hotel, Singapore
- "Recent Development in Engineering Accreditation," Cross-straight and Hong Kong Conference on Instrumentation Science and Technology Talent Training, Tianjin, Binhai New Area, China, Oct. 12-13, 2009
- "Accreditation of Engineering Program in Taiwan," iCEER-2003, International Conference on Engineering Education Research, Tainan, Taiwan, March 1-5, 2005.

Invited Talks

- "Higher Education Innovation in Mechanical Engineering," The 17th International Manufacturing Conference in China (IMCC), 983. Shenzhen, China, Nov. 23rd- 26th, 2017.
- "IEET Engineering and Technology Education Accreditation," Higher Education Evaluation and Accreditation Forum, July 8, 2015.
- "Precision Control of Servo Stages - A Dual Axes Linear Motor Stage and A Piezo-Stage," 2015 Mechatronic Technology Forum, Chinese Culture University, Taipei, Taiwan, May 15, 2015.
- "FEIAP Guideline and Recent Development in Engineering Education," FEIAP Workshop on Education and Accreditation, Jakarta Convention Centre, Jakarta, Indonesia. November 11, 2013.
- "Quality Assurance of Cross-Border Higher Education," APQN Quality Assurance and Higher Education Internationalization, Asia-Pacific Quality Network and Fu Jen Catholic University, Taipei, Taiwan, 27th September, 2013.
- "A Portable Personal Health Care Monitoring Device Technology," Conference on Embedded Control and Remote Monitoring, Chung Chou University of Science and Technology, Yuen-Lin, Taiwan, Nov. 21, 2005.
- "Current Development in Engineering Accreditation System in Taiwan," YunTech, Yunlin, Taiwan, Sep. 4, 2005.
- "Engineering Accreditation," 2004 Annual Conference of Chinese Society of Chemical Engineering, Tainan, Taiwan, Nov. 20~21, 2004.

Societies:

American Society of Mechanical Engineering, **ASME** Fellow 1988.10 ~ present
Institute of Electrical and Electronic Engineering, **IEEE** Member 1989.12 ~ present Institute of Engineering Education, IEET Member 2006 ~ present
Chinese Institute of Medical Ultrasound Member 1996.12 ~ present
The Chinese Institute of Engineers Member 1995.10 ~ present
The Chinese Society of Mechanical Engineering Member 1993.6 ~ present
Chinese Society of Automatic Control Engineering Member 1992.7 ~ present
Chinese Fuzzy Systems Association Member 1994.7 ~ present

Conference Organization and Section Chair:

Automation 2015	Honorary Chair	2015/11/13~15
19th Nano Engineering and Microsystem Technology Conference, Taipei, Taiwan, 8/13~14, 2015	Conference Chair	2015/8/13~14
2012 International Conference on Positioning Technology	General co-Chair	2012/9
2011 World Congress on Intelligent Control and Automation, Taipei,	Program co-Chair	2011/6/21~25

Taiwan		
2010 ASME Dynamics Systems and Control Conference, Cambridge, MA USA	Program Committee	2010/9/13~15
2006 ISPMM, International Symposium on Precision Machine and Measurement	General Co-Chair	2006
2005 CCA, IEEE Conference on Control Application	Program Committee	2005
4th International Workshop on Advanced Motion Control	Technical program committee	1996
1996 Asia Fuzzy System Symposium	Co-chair	1996
13th R.O.C. Conference on Mechanical Engineering	Organizing Committee	1996
1994 Japan-U.S.A. Symposium on Flexible Automation	Technical program committee	1993 – 1994
2nd R.O.C. Fuzzy Systems Conference	Publication Chair	1993

Technology Transfer

1. Smart living application competition for Foxconn, Foxconn Co., NT$1,191,865, 2015.
2. Multiple E-Beam Lithography System Technology (II), Taiwan Semi-Conductor Manufacturing Company, NT$ 600,000, 2008.
3. Multiple E-Beam Lithography System Technology (I), Taiwan Semi-Conductor Manufacturing Company, NT$ 600,000, 2007.
4. High Precision (0.03%) Speed Drive for BLDC Motor, Troy Incorporation, 1999.
5. Kinematics and Servo System Design Synthesis for a PC Board Lithographic Machine, Sun Machinery Cooperation, 1997.
6. High Performance Disk Drive Servo Design, Zentek Cooperation, 1991.

PUBLICATION LIST

A. Refereed journal papers

1. Kuo, Fan-Chun, Hsu, Chekang, Hsieh, Meng-Ru, **Yen, Jia-Yush**, Chen, Liang-Chia, Chung, Tien-Tung, Wang, Fu-Cheng, "Study on the transient response to the point-to-point motion controls on a dual-axes air-bearing planar stage," *INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY*, **111**(9-10), pp.2759-2772, Dec. 2020. (SCI)
2. **Yen, Jia-Yush**; Kang, Hao-Xiang; Shen, Kuan; Chen, Yung-Yaw; Ho, Ming-Chih, "ROBOTIC SUTURING IN MINIMALLY INVASIVE SURGERY" *JOURNAL OF MARINE SCIENCE AND TECHNOLOGY-TAIWAN*, 28(5), pp. 411-421, 2020.
3. Wang, Fu-Cheng, Lu, Jun-Fu, Su, Wei-Jiun, **Yen, Jia-Yush**, "Precision positioning control of a long-stroke stage employing multiple switching control," MICROSYSTEM TECHNOLOGIES-MICRO-AND NANOSYSTEMS-INFORMATION STORAGE AND PROCESSING SYSTEMS, JAN 2020, (SCI, 1.513, 43%)
4. Kuo, Bo-, I, Chang, Wen-Yi, Liao, Tai-Shan, Liu, Fang-Yu, Liu, Hsin-Yu, Chu, Hsiao-Sang, Chen, Wei-Li, Hu, Fung-Rong, **Yen, Jia-Yush**, Wang, I-Jong, "Keratoconus Screening Based on Deep Learning Approach of Corneal Topography," TRANSLATIONAL VISION SCIENCE & TECHNOLOGY, **9**(2), no. 53, JAN 2020.
5. Tsai, I-Haur, **Yen, Jia-Yush**, Tsao, Tsu-Chin, Huang, Chien-Yao, "Active Transmission Module for Generator Speed Regulation," IEEE ACCESS, **8**, pp.203787-203792, 2020.
6. Su, Shu-Te, Ho, Ming-Chih, **Yen, Jia-Yush**, Chen, Yung-Yaw, "Featured Surface Matching Method for Liver Image Registration," IEEE ACCESS, **8**, pp. 59723-59731, 2020. (SCI, 4.098 85.48%)
7. J. Y. Chuang, Y. Z. Lin, Y. M. Hsiao, Y. C. Liu, D. Shu, C. K. Kuan, H. Wu, I. C. Sheng, Y. T. Cheng, C. Shueh, C. C. Chang, C. K. Chan, **J. Y. Yen**, "Discussion and improvement of a blade-type XBPM with coupling suppression by compensating calibration coefficients," *Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **953**, No. 163174, Feb. 11, 2020. (SCI, 1.433, 69%)
8. Yi-Liang Yeh , **Jia-Yush Yen** and Chi-Ju Wu, "Adaptation-enhanced model-based control with charge feedback for piezo-actuated stage," Asian Journal of Control, Vol. 22, No. 1, pp. 1–13, January 2020, DOI: 10.1002/asjc.1933, (SCI, 1.528, 38/61)
9. Ship-Bin Chiou and **Jia-Yush Yen**, "A Survey of Suspension Component Specifications and Vehicle Vibration Measurements in an Operational Railway System," (2019) *Journal of Vibration Engineering and Technologies*, **7** (4), pp. 415-431. DOI: 10.1007/s42417-019-00125-0 (SCI, 0.615, 9.77%)
10. Ship-Bin Chiou, **Jia-Yush Yen**, "Precise railway alignment measurements of the horizontal circular curves and the vertical parabolic curves using the chord method," *Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit*, **233**(5), pp. 537-549., May, 2019. (SCI, 1.54, 44.32%)
11. Yu-Ping Lee, Hsin-Yu Liu, Po-Chun Lin, Yi-Huan Lee, Leng-Rong Yu, Chih-Chen Hsieh, Po-Jen Shih, Wen-Pin Shih, I-Jong Wang, **Jia-Yush Yen**, Chi-An Dai, "Facile fabrication of superporous and biocompatible hydrogel scaffolds for artificial corneal periphery," (2019) *Colloids and Surfaces B: Biointerfaces*, **175**, pp. 26-35. DOI: 10.1016/j.colsurfb.2018.11.013, March 1, 2019. (SCI, 3.997, 13/72)
12. Yen-Han Wang, Tzu-Wei Wang, **Jia-Yush Yen**, Fu-Cheng Wang, "Dynamic human object recognition by combining color and depth information with a clothing image histogram," (2019) *International Journal of Advanced Robotic Systems*, **16** (1), DOI: 10.1177/1729881419828105 (SCI, 1.002, 23/26)
13. Wang, F.-C., Peng, Y.-K., Lu, J.-F., Chung, T.-T., **Yen, J.-Y.**, "Micro-lens fabrication by a long-stroke precision stage with switching control based on model response prediction," (2019) *Microsystem Technologies*, DOI: 10.1007/s00542-019-04374-7
14. I-Haur Tsai, Kuan-Hsun Yu, Alexander Tseng, **Jia-Yush Yen**, Tseng-Ti Fu, Evan Huang, "Battery cell modeling and online estimation of the state of charge of a lithium-ion battery," (2018) *Journal of the Chinese Institute of Engineers, Transactions of the Chinese Institute of Engineers, Series A*, 41 (5), pp.

412-418. DOI: 10.1080/02533839.2018.1490203 (SCI, 0.471, 78/86)

15. Chiou, S.-B., **Yen, J.-Y.**, "Modeling of railway turnout geometry in the frog area with the vehicle wheel trajectory," (2018) *Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit*, **232** (6), pp. 1598-1614. DOI: 10.1177/0954409717739734. (SCI, 1.103, 86/128)
16. Shih-Tang Liu, **Jia-Yush Yen**, Fu-Cheng Wang, "Compensation for the residual error of the voltage drive of the charge control of a piezoelectric actuator," (2018) *Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME*, **140** (7), DOI: 10.1115/1.4038636. (SCI, 1.521, 34/61)
17. Shih, Po-Jen; Wang, I-Jong; Cai, Wen-Feng; **Yen, Jia-Yush**, "Biomechanical Simulation of Stress Concentration and Intraocular Pressure in Corneas Subjected to Myopic Refractive Surgical Procedures," (2017) *Scientific Reports,* **7** (1), DOI: 10.1038/s41598-017-14293-0. (SCI, 4.12, 82.03%)
18. Lee, Wei-Yu; Li, Chi-Ying; **Yen, Jia-Yush**, "Integrating wavelet transformation with Markov random field analysis for the depth estimation of light-field images," (2017) *IET Computer Vision*, **11** (5), pp. 358-367. DOI: 10.1049/iet-cvi.2016.0151 (SCI, 0.878, 104/133, 205/262)
19. Lin, Shih-Yu; **Yen, Jia-Yush**; Chen, Min-Shin; Chang, Shu-Hau; Kao, Chung-Yao, "An Adaptive Unknown Periodic Input Observer for Discrete-Time LTI SISO Systems," (2017) *IEEE Transactions on Automatic Control*, 62 (8), pp. 4073-4079. DOI: 10.1109/TAC.2016.2618540 (SCI, 4.27, 7/60, 28/262)
20. **Jia-Yush Yen**, I-Jong Wang, Po-Jen Shih, and Hui-Jyun Tsao, "On the in Vivo Estimation of the Corneal Young's Modulus," *JOJ Ophthalmology*, **5**(4), pp: 1-8, DOI: 10.19080/JOJO.2017.05.555670, November 22, 2017 (review paper)
21. Li, Kang; Chou, Fang-Chieh; **Yen, Jia-Yush**, "Real-time, energy-efficient traction allocation strategy for the compound electric propulsion system," (2017) *IEEE/ASME Transactions on Mechatronics*, 22 (3), pp. 1371-1380. DOI: 10.1109/TMECH.2017.2667725 (SCI, 4.357, 1/44, 3/130, 25/262, 6/60)
22. Wen, Sheng-Fan; **Yen, Jia-Yush**; Liu, Shih-Tang; Wang, Fu-Cheng; Chen, Min-Shin; Chen, Yung-Yaw; Hung, Chung-Wen; "Compensation of the residual error from the charge feedback control of a piezoelectric-actuated stage," *PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART I-JOURNAL OF SYSTEMS AND CONTROL ENGINEERING*, **231**(5), SI, pp: 414-424, MAY 2017 (SCI, 1.42, 40/60)
23. Wang, Fu-Cheng; Wang, Kuo-An; Chung, Tien-Tung; **Yen, Jia-Yush**; "Fabrication of large-scale micro-structures by two-photon polymerization with a long-stroke precision stage," *ADVANCES IN MECHANICAL ENGINEERING*, **9**(4), Article Number: 1687814017695757, DOI: 10.1177/1687814017695757, APR 4 2017 DOI: 10.1177/1687814017695757 (SCI, 0,827, 103/130)
24. Huang, Wei-Lun; Kuo, Fu-Cun; Chou, Shang-Chin; **Yen, Jia-Yush**; Tsai, I-Haur; Chung, Tien-Tung; Hung, Chung-Wen; "High-performance and high-precision servo control of a single-deck dual-axis PMLSM stage," *INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY*, **90**(1-4), pp: 865-874, APR 2017 DOI: 10.1007/s00170-016-9355-0 (SCI, 2.209, 25/60, 20/44)
25. Shih, Po-Jen; Huang, Chun-Ju; Huang, Tzu-Han; Lin, Hung-Chou; **Yen, Jia-Yush**; Wang, I-Jong; Cao, Hui-Jyun; Shih, Wen-Pin; Dai, Chi-An; "Estimation of the Corneal Young's Modulus In Vivo Based on a Fluid-Filled Spherical-Shell Model with Scheimpflug Imaging," *JOURNAL OF OPHTHALMOLOGY*, Article Number: 5410143, DOI: 10.1155/2017/5410143, 2017 (SCI, 1.712, 35/59, 84/128)
26. Wang, Fu-Cheng; Wang, Kuo-An; Chen, Yi-Yi; Chen, Hsueh-Ju; **Yen, Jia-Yush**; "Impacts of sensor layouts on the performance of a long-stroke nano-positioning stage," *ADVANCES IN MECHANICAL ENGINEERING*, **8**(11), Article Number: 1687814016680192, DOI: 10.1177/1687814016680192, NOV 2016 (SCI, 0.827, 103/130)
27. Chen, Min-Shin; Lin, Shih-Yu; Tseng, Ming-Lei; Yeh, Yi-Liang; **Yen, Jia-Yush**; "Robust State-and-Disturbance Observer Design for Linear Non-minimum-phase Systems," *ASIAN JOURNAL OF CONTROL*, **18**(3), Pages: 1135-1141, DOI: 10.1002/asjc.1174, MAY 2016 (SCI, 1.556, 25/58)
28. Shih, Po-Jen, Cao, Huei-Jyun, Huang, Chun-Ju, Wang, I-Jong, Shih, Wen-Pin, **Yen**, **Jia-Yush**, "A Corneal Elastic Dynamic Model Derived From Scheimpflug Imaging Technology," *Ophthalmic and*

Physiological Optics, 2015 Nov; **35**(6):663-72. doi: 10.1111/opo.12240. Epub 2015 Sep 9. (SCI, 2.177, 20/57)

29. Chao, Yu-Tin, Hsu, Che-Jung, Yu, Ya-Lin, **Yen**, **Jia-Yush**, Ho, Ming-Chih, Che, Yung-Yaw, Chang, Hung-Cheng, Lian, Feng-Li, "A Novel Sound-Blocking Structure Based on the Muffler Principle for Rib-Sparing Transcostal High-Intensity Focused Ultrasound Treatment," *International Journal of Hyperthermia*, **31**(5): 507-527, 13 May 2015 (**cover story**) http://dx.doi.org/10.3109/02656736.2015.1028483 (SCI, 2.769, 30/122)
30. Chang, Hung-Cheng; **Yen, Jia-Yush**; Huang, Chun-Hao; Chen, Ga-Lane; Hsu, Che-Kang, "A Smart-Card E-paper Display System Based on RF Power Harvesting," *IETE JOURNAL OF RESEARCH*, **61**(3), pp: 201-212, DOI: 10.1080/03772063.2014.986226, MAY 4 2015 (SCI, 0.189, 235/248)
31. Tsai, Hsin-Fang, **Yen**, **Jia-Yush**, Chen, Lien-Sheng, Chang, Hung-Cheng, Chen, Jack J.H., Wang, Fu-Chen, Wung, Wen-Bin, "Frequency Domain Effect of a Hysteresis Suppression System with Inverse Preisach Model Based Control," *International Journal of Automation and Smart Technology*, **5**(4) 2015, pp. 265-273. (Inspec, DOAJ).
32. Yu, Ya-Lin, Chao, Yu-Tin, Lee, Lai-Chung, **Yen**, **Jia-Yush**, Fan, Yun-Chiu, "A Novel Soundproof Ventilation Plant Design with High Performance and No Energy Consumption," *Mathematical Problems in Engineering*, **2015**, Article ID 496748, 2015. (SCI, 1.082, 33/87)
33. Kam, Michael and **Yen**, **Jia-Yush**, "Minimally invasive surgery instruments based on a four-bar linkage design," *International Journal of Automation and Smart Technology*, Published on line, **5**(2), 2015, pp. 81-84. (Inspec, DOAJ)
34. Chang, Hung-Cheng, Chao, Yu-Tin, **Yen**, **Jia-Yush**, Yu, Ya-Lin, Lee, Chun-Nan, Ho, Bing-Ching, Liu, Kou-Chen, Fang, Jiunn, Lin, Chii-Wann, Lee, Jiun-Haw, "A Turbidity-test Based Centrifugal Microfluidics Diagnostic System for Simultaneous HBV HCV and CMV Detection," *Advances in Materials Science and Engineering*, **2015**, Article ID 306708, 2015. (SCI, 0.897, 169/251)
35. Wang, Fu-Cheng; Chen, Lien-Sheng; Tsai, Yan-Chen; Hsieh, Chin-Hui; **Yen, Jia-Yush**, "Robust loop-shaping control for a nano-positioning stage," *Journal of Vibration and Control*, **20**(6), pp: 885-900, APR, 2014 (SCI, ENGINEERING, MECHANICAL, 15/125)
36. Chen, Min-Shin; Yeh, Yi-Liang; **Yen, Jia-Yush**, "Output Feedback Sliding Mode Control - A Robust Observer Approach for SISO Systems," *Journal of the Chinese Society of Mechanical Engineers*, **35**(4), pp.265-271, AUG 2014, (SCI, Engineering, Mechanical, 124/128)
37. Cheng-Ju Wu, Shih-Yu Lin, Shang-Chin Chou, Chia-Yun Tsai and **Jia-Yush Yen**, "Temperature Effects on the Magnetic Properties of Silicon−Steel Sheets using Standardized Toroidal Frame," *The Scientific World Journal*, 2014, Article ID 975051, 2014, (SCI, 1.219, 16/55)
38. Chen, Lien-Sheng; **Yen, Jia-Yush**; Chen, Jack J. H.; Kuo, Fu-Cun; Chen, Min-Shin; Chen, Yung-Yaw; Chung, Ben-I; "Precision tracking of a piezo-driven stage by charge feedback control," *Precision Engineering*, **37**(4), pp: 793-804, OCT 2013 (SCI, 1.393, ENGINEERING, MULTIDISCIPLINARY, 22/90)
39. Lee, Yen-Min; Li, Jia-Han; Sheu, Tony Wen-Hann; Tsai, Kuen-Yu; **Yen, Jia-Yush**; "Solution-Refined Method for Electrostatic Potential Distribution of Large-Scale Electron Optics," *JAPANESE JOURNAL OF APPLIED PHYSICS*, Vol. 52, No. 5, Article No.: UNSP 055202, Part: 1, MAY 2013 (SCI, 1.067, PHYSICS, APPLIED, 82/128)
40. Kuo, Yi-Hung; Wu, Cheng-Ju; Kuo, Fu-Tsun; **Yen, Jia-Yush**; Chen, Yung-Yaw; "Image based in situ electron-beam drift detection by silicon photodiodes in scanning-electron microscopy and an electron-beam lithography system," *MICROELECTRONIC ENGINEERING*, Vol: 103, pp: 137-143, MAR 2013. (SCI, ENGINEERING, ELECTRICAL & ELECTRONIC, 1.224, 109/243)
41. Lin, Liu-Hsu; **Yen, Jia-Yush**; Wang, Fu-Cheng , "Robust control for a pneumatic muscle actuator system," TRANSACTIONS OF THE CANADIAN SOCIETY FOR MECHANICAL ENGINEERING, **37**(3), pp.581-590, 2013
42. Chung-Wen Hung, **Jia-Yush Yen**, "A Robust Variable Sampling Time BLDC Motor Control Design Based Upon mu-Synthesis," *The Scientific World Journal*, **2013** (2013), Article ID 236404,

http://dx.doi.org/10.1155/2013/236404. (SCI 1.730, 13/56, MULTIDISCIPLINARY SCIENCES)

43. Jyun-Yan Chuang, Jia-Yush Yen, Bin-Yih Juang , Wen-Pin Weng, and Mon-Hsun Lin, "Construction of a High Frequency and High Reflectance Shutter for a Direct Write EUV Lithography System," *International Journal of Automation and Smart Technology*, **3**(2), pp. 107-115, (2013), DOI: 10.5875 /ausmt.v3i2.189. (Inspec, DOAJ)
44. Liu-Hsu Lin, **Jia-Yush Yen**, Fu-Cheng Wang, "System Identification and Robust Control of a Pneumatic Muscle Actuator System," *Applied Mechanics and Materials*, **284-287** (2013) pp.1936-1940. (EI)
45. Chang, Kai-Hsiang; Ho, Ming-Chih; Yeh, Chi-Chuan; Chen, Yu-Chien; Lian, Feng-Li; Lin, Win-Li; **Yen, Jia-Yush**; Chen, Yung-Yaw; "Effectiveness of external respiratory surrogates for in vivo liver motion estimation," *MEDICAL PHYSICS*, **39**(8), pp.5293-5301, Aug. (2012) DOI: 10.1118/1.4738966. (SCI, 2.830, 29/116)
46. Lien-Sheng Chen, **Jia-Yush Yen***, Yung-Pin Chen, Lon A. Wang, Tien-Tung Chung, Hung-I Lin, Ping-Hung Chen, Shu-Hung Chang, "Longitudinal Stitching of Sub-micron Periodic Fringes on a Roller," *Microelectronic Engineering*, **88**(11), Dec. 2011, pp. 3235-3243, DOI: 10.1016/j.mee.2011.07.006, (MOEA98-EC-17-A-05-S2-0129, NSC98-2221-E-002-165-MY3) (SCI, 1.557, 72/244)
47. Sheng-Yung Chen, Kuen-Yu Tsai, Philip C. W. Ng, Hoi-Tou Ng, Chun-Hung Liu, Yu-Tian Shen, Chieh-Hsiung Kuan, Yung-Yaw Chen, Yi-Hung Kuo, Cheng-Ju Wu, and **Jia-Yush Yen**, "In-situ beam drift detection using a two-dimensional electron beam position monitoring system for multiple-electron-beam-direct-write lithography," *Journal of Vacuum Science & Technology B*, **29**(4), Jul. 2011 Article Number: 041607, DOI: 10.1116/1.3613697 (NSC98-2622-E-002-003-CC1) (SCI, 1.341, 96/244)
48. Chun-Jie Chang, Yi-Lung Yang, Yu-Ping Lee, Chi-Ju Chiang, Chi-An Dai, Jyh-Chien Chen, Yao-Yi Cheng, Chien-Chun Chen, Ming-Wei Liu, Wen-Pin Shih, **Jia-Yush Yen**, "Bionic soft crystalline lens materials for MEMs applications based on self-assembling amphiphilic block copolymer/nanoparticle hybrids," *Microelectronic Engineering*, **88**(8), Aug., 2011, pp. 1737–1741, DOI: 10.1016/j.mee.2010.12.024. (NSC98-2622-E-002-003-CC1) (SCI, 1.557, 72/244)
49. Kuo, Yi-Hung; Wu, Cheng-Ju; **Yen, Jia-Yush**; Chen, Sheng-Yung; Tsai, Kuen-Yu; Chen, Yung-Yaw, "Silicon photodiodes for electron beam position and drift detection in scanning electron microscopy and electron beam lithography system," *Nuclear Instruments & Methods in Physics Research Section A-Accelerators Spectrometers Detectors and Associated Equipment*, **645**(1), p 84-89, July 21, 2011. DOI: 10.1016/j.nima.2010.12.227 (NSC98-2622-E-002-003-CC1) (SCI, 1.207, 12/35)
50. Pei-Ying Yeh, Po-Ching Yen, **Jia-Yush Yen**, Tsung-Tsong Wu, Pei-Ling Liu, Chia-Ling Wu, Ching-Yu Peng, "Focal Point Tracking System for Concentration Solar Power Collection," *The Renewable & Sustainable Energy Reviews*, **15**(6), pp. 3029-3033, Aug. 2011, DOI: 10.1016/j.rser.2011.03.011. (NSC 97-2627-E-002 -001), (SCI, 6.018, 4/81)
51. Kai-Chen Kuo, Pee-Yew Lee, **Jai-Yush Yen**, "Amorphization behavior of $Ni_{57}Zr_{20}Ti_{22}Ge_1$ powders by mechanical alloying," *Key Engineering Materials*, **479**, 2011, pp. 48-53. 2011 (EI)
52. Chun-Ju Huang, Cheng-Shi Tsai, Bo-Ru Chen, **Jia-Yush Yen**, Jyh-Fa Lee, Liu-Hus Lin, and, Min-Shin Chen, "High Performance FOV Switching Mechanism Design for an Infrared Zoom Lens," *International Journal of Automation and Smart Technology*, **1**(2), DOI: 10.5875/ausmt.v1i2.78, 2011. (Inspec, DOAJ)
53. Wang Fu-Cheng; Hong Min-Feng; **Yen Jia-Yush**, "Robust Control Design for Vibration Isolation of an Electron Beam Projection Lithography System," *JAPANESE JOURNAL OF APPLIED PHYSICS*, **49**(6), No.: 06GE04, 2010. (NSC98-2622-E-002-003-CC1) (SCI, 1.058, 76/125)
54. Liu Shu-Hung; Huang Tse-Shih; **Yen Jia-Yush**, "Comparison of sensor fusion methods for an SMA-based hexapod biomimetic robot," *ROBOTICS AND AUTONOMOUS SYSTEMS*, **58**(5), pp. 737-744, 2010. (NSC 94-2213-E-002-021) (SCI, 1.056, 26/58)
55. Ching-En Tseng, Jia-Yush Yen*, Ming-Wei Chang, Wei-Chien Chang, Chih-Kung Lee, "Modified Frequency-Partitioned Spectrum Estimation for a Wireless Health Advanced Monitoring Bio-Diagnosis

System," *IEEE TRANSACTIONS ON SYSTEMS MAN AND CYBERNETICS PART A-SYSTEMS AND HUMANS*, **40**(3), pp.611-622, 2010. (NSC92-2218-E-002-048) (SCI, 2.123, 2/20, 7/99)

56. Ching-En Tseng, Ching-Yu Peng, Ming-Wei Chang, Jia-Yush Yen*, Chih-Kung Lee, Tse-Shih Huang, "Novel Approach to Fuzzy-Wavelet ECG Signal Analysis for a Mobile Device," *JOURNAL OF MEDICAL SYSTEMS*, **34**(1), pp. 71-81, 2010. (NSC92-2218-E-002-048) (SCI, 1.132, 17/23)
57. Shu-Hung Liu, Tse-Shih Huang, Jia-Yush Yen*, "Tracking Control of Shape-Memory-Alloy Actuators Based on Self-Sensing Feedback and Inverse Hysteresis Compensation," *SENSORS*, **10**(1), pp. 112-127, 2010. (NSC 95-2221-E-002-302-MY3) (SCI, 1.739, 14/58)
58. Su, Ming-Shing, Tsai, Kuen-Yu, Lu, Yi-Chang, Kuo, Yu-Hsuan, Pei, Ting-Hang, Yen, Jia-Yush, "Architecture for next generation massively parallel maskless lithography system (MPML2)," Editor(s): Herr, DJC, *ALTERNATIVE LITHOGRAPHIC TECHNOLOGIES II Book Series: Proceedings of SPIE*, **7637**, Article Number: 76371Q, DOI: 10.1117/12.846444, Published: 2010
59. Wang, Fu-Cheng; Tsao, Yu-Chia; Yen, Jia-Yush, "The application of disturbance response decoupling to the vibration control of an electron beam lithography system," *Japanese Journal of Applied Physics*, v 48, n 6 PART 2, p 06FB041-06FB045, June 2009, Special Issue: Microprocesses and Nanotechnology (NSC 97-2622-E-002-012-CC1) (SCI, 1.058, 76/125)
60. Chen, Yung-Pin, Chen, Cheng-Hung, Chang, Jer-Haur, Chiu, Hsin-Chieh, Chen, Guan-Yu, Chiang, Chieh-Hsiu, Chen, Lien-Sheng, Tseng, Ching-Tung, Lee, Chih-Hsien, **Yen, Jia-Yush**, Wang, Lon A., "Stitching periodic submicron fringes by utilizing step-and-align interference lithography," *JOURNAL OF VACUUM SCIENCE & TECHNOLOGY B*, **27**(6), Pages: 2951-2957, 2009 (MOEA 98-EC-17-A-05-S2-0129) (SCI, 1.341, 96/244)
61. Yao-Ting Mao, Kai-Chen Kuo, Ching-En Tseng, Jian-Yin Huang, Yi-Chih Lai, **Jia-Yush Yen***, Chih-Kung Lee, and Wei-Li Chuang, "Research on three dimensional machining effects using atomic force microscope," *Review of Scientific Instruments*, **80**, 065105, 2009. (NSC97-2622-E-002-012-CC1) (SCI, 1.367, 20/58)
62. Wei-Li Chuang, Cheng-Hung Chen, **Jia-Yush Yen***, Yuan-Liang Hsu, "Using MPCA of spectra model for fault detection in a hot strip mill," *Journal of Materials Processing Technology*, **209**(8), 21 April 2009, pp.4162-4168 (NSC95-2221-E-002-435-MY3) (SCI, 1.783, 4/42)
63. Jia-Yush Yen*, Yea-Chin Yeh, Yung-Hao Peng, Jyh-Fa Lee, "Application of the continuous no-reset switching iterative learning control on a novel optical scanning system," *Mechatronics*, **19**(1), February 2009, Pages 65-75 (NSC93-2623-7-002-006) (SCI, 1.255, 28/121)
64. Sheng-Yung Chen, Kuen-Yu Tsai, Hoi-Tou Ng, Chi-Hsiang Fan, Ting-Hang Pei, Chieh-Hsiung Kuan, Yung-Yaw Chen, and Jia-Yush Yen, "Preliminary Design of a Two-Dimensional Electron Beam Position Monitor System for Multiple-Electron-Beam–Direct-Write Lithography", *Proc. of SPIE*. **7520**, 2009, 75202K, CCC code: 0277-786X/09/$18, doi: 10.1117/12.837048
65. Wu, Chih-Ching, Chen, Wen-Shiang, Ho, Ming-Chih, Huang, Kai-Wen, Chen, Chiung-Nien, **Yen, Jia-Yush**, Lee, Po-Huang, "Minimizing abdominal wall damage during high-intensity focused ultrasound ablation by inducing artificial ascites," *JOURNAL OF THE ACOUSTICAL SOCIETY OF AMERICA*, **124**(1), 674-679, 2008 (SCI, 1.550, 9/30) (NSC92-2218-E-002-048)
66. Liu, Shu-Hung, Lai, Yi-Chih, **Yen, Jia-Yush***, "Parameter identification when designing a solid-modeling-based grinding-machine controller," *International Journal of Machine Tools & Manufacture*, **48**(7-8), June 2008, pp.851-857. (SCI, 2.169, 7/121) (NSC94-2213-E-002-017)
67. Chuang, WL; Chen, CH; **Yen, JY***, Hsu, YL, "Downcoiler surface fault prediction for a hot strip steel mill," *PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART I-JOURNAL OF SYSTEMS AND CONTROL ENGINEERING*, **222**(8), 771-786, 2008 (SCI, 0.477, 45/58) (NSC94-2213-E-002-017)
68. Fu-Cheng Wang, Hsuan-Tsung Chen, Yee-Pien Yang, **Jia-Yush Yen**, "Multivariable robust control of a proton exchange membrane fuel cell system," *Journal of Power Sources*, **177**(2), March 2008, Pages 393-403 (SCI, 4.951, 2/27) (NSC95-2221-E-002-435-MY3)
69. Mandy Liu, Pei-Fen Chang, Andrew M. Wo, **Jia-Yush Yen**, Yeong-Bin Yang and Che-Ho Wei,

"Quality Assurance of Engineering Education through Accreditation of Programs in Taiwan" *International Journal of Engineering Education*, **24**(5), pp. 854-863, 2008 (SCI, 0.418, 60/90)

70. Yi-Chih Lai; Ye-Ling Lee; **Jia-Yush Yen (Yen HY)**, "Design and Servo Control of a Single-Deck Planar Maglev Stage," *Magnetics, IEEE Transactions on*, **43**(6), June 2007 pp:2600-2602, (SCI, 1.363, 94/244) (NSC91-2213-E-002-022)
71. Chung-Wen Hung; Cheng-Tsung Lin; Chih-Wen Liu; **Jia-Yush Yen**, "A Variable-Sampling Controller for Brushless DC Motor Drives With Low-Resolution Position Sensors," *Industrial Electronics, IEEE Transactions on*, **54**(5), Oct. 2007 Page(s):2846 – 2852, Digital Object Identifier 10.1109/TIE.2007.901303 (SCI, 5.468, 2/229) (NSC92-2213-E-002-052)
72. Yea-Chin Yeh, **Jia-Yush Yen**, Jyh-Fa Lee, Wei-Chien Tu, "The Application of the No-reset Iterative Learning Control on a Novel Optical Scanning System," *Journal of CSME*, **27**(5), pp.593-598, 2006. (EI)
73. Chih-Ching Wu, Yao-Shen Tung, Hao-Li Liu, Wen-Shiang Chen, Win-Li Lin, **Jia-Yush Yen**, "In-vitro and In-vivo Investigation of Contrast-agent Enhanced Ultrasound Thermal Ablation," *Ultrasound in medicine & biology*, **32**, no. 5, pp. 110, (May, 2006) (SCI) (2.395, 3/26) (NSC92-2218-E-002-048)
74. Yi-Chih Lai, **Jia-Yush Yen**, "Design of a novel 6-DOF planar maglev system," *Journal of Magnetism and Magnetic Materials*, 304, 2006, e386-e390. (SCI, 1.283, 83/191) (NSC91-2213-E-002-022)
75. Ruey-Jeng Lee, Kuan-Chien Chou, Shu-Hung Liu, **Jia-Yush Yen**, "Solid modeling based servo system design for a high speed micro grinding machine," *International Journal of Machine Tools and Manufacture*, **46**(2), February 2006, pp. 208-217 (SCI, 1.576, 13/105) (NSC90-2213-E-002-055)
76. **Yen JY**, Lin IM, Lee CK, "Effect of force control algorithms on the scanning probe microscope lithography system," *Review of Scientific Instruments*, **76**(3): Art. No. 036103 MAR 2005. (SCI, 1.783, 16/56) (NSC94-2213-E-002-017)
77. **Yen, JY**; Lan, KJ; Kramar, J, "Active vibration isolation of a large stroke scanning probe microscope by using discrete sliding mode control," *Sensors and Actuators A-Physical*, **121**(1): 243-250 May 31 2005 (SCI, 1.724, 64/229) (NSC94-2213-E-002-017)
78. Lan, KJ; **Yen, JY**; Lee, CK; et al., "An AFM probe controller design based on mu-synthesis," *Asian Journal of Control*, **7**(1): 12-19 MAR 2005 (SCI, 0.562, 43/53) (NSC94-2213-E-002-017)
79. Jao-Ming Huang and **Jia-Yush Yen (Yen HY)**, "Radial fine seek control with fault protection in a digital versatile disc player," *Mechatronics*, **15**(2), March 2005, Pages 129-150. (SCI, 1.434, 19/105)
80. Kuo-Jung Lan, **Jia-Yush Yen**, John A. Kramar, "Sliding mode control for active vibration isolation of a long range scanning tunneling microscope," *Review of Scientific Instruments*, **75**, 11, Nov., , 2004, pp. 4367-4373. (SCI, 1.783, 16/56)
81. Hsiao-Yi Huang, **Jia-Yush Yen**, Sih-Li Chen, and Feng-Chu Ou, "Development of an Intelligent Energy Management Network for Building Automation," *IEEE Transactions on Automation Science and Engineering*, **1**(1), July, 2004, pp.14-25. (SCI, 1.929, 16/53) (NSC91-2622-E-002-022-CC3)
82. Liu, H.L, Chen, Y.Y., **Yen, J.Y.**, Lin, W.L., "Pilot point temperature regulation for thermal lesion control during ultrasound thermal therapy," *Medical and Biological Engineering and Computing*, 42(2), March 2004, pp. 178-188. (EI)
83. Kuo-Jung Lan, **Jia-Yush Yen**, John A. Kramar, "Active Vibration Isolation For A Long Range Scanning Tunneling Microscope," *Asian Journal of Control*, Vol. 6, No. 2, pp. 179-186, 2004. (EI, SCI expanded)
84. **Jia-Yush Yen** and Hui-Man Chang, "Performance robustness and stiffness analysis on a machine tool servo design," *International Journal of Machine Tools and Manufacture*, Vol.44, No.5, pp 523-531, April, 2004, (SCI, 1.574, 13/105)
85. Jia-Yush Yen Jia-Hua Lin, "A Mechatronics Approach to the Servo Design for A Meglev System," *Bulletin of the College of Engineering*, N.T.U., No. 90, Oct., 2004, pp. 119-126.
86. Jao-Ming Huang, **Jia-Yush Yen**, "A Novel Fine Track-Seeking Scheme for Optical Storage Device," *IEEE Transactions on Consumer Electronics*, Vol.49, No.2, May, pp. 382-387, 2003. (SCI, 1.871, 59/229)

87. Hao-Li Liu, Yung-Yaw Chen, **Jia-Yush Yen** and Win-Li Lin, "Treatment time reduction for large thermal lesions by using a multiple 1D ultrasound phased array system," *Physics in Medicine and Biology*, **48**, 1173-1190, 2003. (SCI, 2,128, 6/42, EI)
88. Y.Y. Chen, P.Y.Huang and **Yen JY**, "Frequency-domain identification algorithms for servo systems with friction," *IEEE Transactions on Control Systems Technology*, **10**(5), 654-665, 2002. (SCI, 1.157, 55/205, EI) (NSC 91-2213-E-002-028)
89. L-Y Kuo and **J-Y Yen**, 2002, "A genetic algorithm-based parameter-tuning algorithm for multi-dimensional motion control of a computer numerical control machine tool," *Proceedings of the IME Part B-Journal of Engineering Manufacture*, Vol.216. pp. 429-438. (SCI, 0.280, 3/12, EI) (NSC 89-TPC-7-002-008)
90. Lin, WL, Liang, TC, **Yen, JY**, Liu, HL, Chen, YY, 2001, Oct., "Optimization of power deposition and a heating strategy for external ultrasound thermal therapy," *Medical Physics*, Vol.28, No.10, pp.2172-2181. (SCI, 3.81, 13/90)
91. Lun-Yu Kuo and **Jia-Yush Yen**, "Servo parameter tuning for a 5-axis machine center based upon GA rules," *International Journal of Machine Tools & Manufacture*, Vol.41, No.11, pp.1535-1550. Sep. 2001. (SCI, 1.576, 13/105). (NSC89-CS-D-082-005)
92. Lin WL, Fan WC, **Yen JY**, Chen YY, Shieh MJ, "A theoretical study of cylindrical ultrasound transducers for intracavitary hyperthermia," *International Journal of Radiation Oncology Biology Physics*, 46 (5): 1329-1336, MAR 15 2000 (SCI, 4.297, 6/84, 26/123, EI) (1)
93. Huang, Chao-Ming, **Jia-Yush Yen**, Min-Shin Chen, "Adaptive nonlinear control of repulsive maglev suspension systems," *Control Engineering Practice*, **8**, 1357-1367, Nov., 2000, (SCI, 1.871, 59/229) (NSC 87-2213-E-002-091)
94. Lin, Win-Li, Chihng-Tsung Liauh, **Jia-Yush Yen**, Yung-Yaw Chen, Ming-Jium Shieh, 2000, "Treatable domain and optimal frequency for brain tumors during ultrasound hyperthermia," *International Journal of Radiation Oncology Biological Physics*, Vol.46, No.1, pp.239-247, (SCI, 0.624, 158/205, EI), (NSC 86-2213-E-002-033).
95. Wu, Tzann-Dwo, Yih-Nan Chen, **Jia-Yush Yen (Yan)** and Shenq-Yuh Jaw, 2000, "Design optimization for an LPG automobile engine," *International Journal of Vehicle Design*, Vol.24, No.1, pp.100-120, (SCI, 0.238, 83/106, EI)
96. Chen, S.L., **J.Y. Yen** and M.C. Huang, 2000, "Analysis design and testing of a prototype jet-refrigeration air conditioning system," *ASHRAE Transactions*, (EI)
97. Huang, C.M. and **Yen, J.Y.**, 1999, "System modeling and feedback linearization control of a precision repulsive maglev stage," *Journal of the Chinese Society of Mechanical Engineers*, Vol.22, No.6, Dec. (EI) (NSC-86-2213-E-002-012)
98. Lin, W.L., Chen, Y.Y., Lin, S.Y., **Yen, J.Y.**, Shieh, M.J., Kuo, T.S., 1999, "Optimal configuration of multiple-focused ultrasound transducers for external hyperthermia," *Medical Physics*, Vol.26, No.9, Sep., pp.2007-2016. (SCI, 3.81, 13/90)
99. **Yen, J.Y.**, Huang, C.J. and Lu, S.S., 1999, "A New Compensator For Servo Systems with Position Dependent Friction," *ASME Transactions on Dynamic Systems, Measurements and Control*, Vol.121, Dec., pp. 612-618. (SCI, 0.325, 33/46, 36/48, EI).
100. Chen, M.S. and **Yen, J.Y.**, 1999, "An application of the least-squares algorithm to the observer design for linear time-varying systems," *IEEE Transactions on Automatic Control*, Vol.44, No.9, pp.1742-1745. (SCI, 1.896, 5/47, EI)
101. Huang, Shih-Jung, **Yen, J.Y.**, Lu, Shui-Shong, 1999, "Dual mode control of a system with friction," *IEEE Transactions on Control Systems Technology*, Vol.7, No.3, May, pp.306-314. (SCI, 2.130, 11/53) (NSC 85-2212-E-002-060)
102. Ho, Hsin-Chiang, **Yen, Jia-Yush**, and Lu, Shui-Shong, 1999, "A decoupled path-following control algorithm based upon the decomposed trajectory error", *International Journal of Machine Tools and Manufacture*, **39**(10), 1999, 1619-1630. (SCI, 1.576, 13/105) (NSC87-2212-E-002-007)
103. Lin, W.L., **Yen, J.Y.**, Chen, Y.Y. Jin, K.W. and Shieh, M.J., 1999 "Relationship between acoustic

aperture size and tumor conditions for external ultrasound hyperthermia," *Medical Physics*, Vol.26, No.5, May, pp.818-824. (SCI, 3.81, 13/90) (NSC 86-2213-E-002-033)

104. Chen, Y.Y., Lin, W.L., Liou, H.L., **Yen, J.Y.,** Shieh, M.J., 1999 "Self-tuning fuzzy logic control for ultrasound hyperthermia with reference temperature based on objective function," *Medical Physics*, Vol.26, No.5, May, pp.825-833. (SCI, 3.81, 13/90)
105. Fung, Rong-Fong, Chen, Ken-Wang, **Yen, Jia-Yush**, 1999, "Fuzzy sliding mode controlled slider-crank mechanism using a PM synchronous servo motor drive," *International Journal of Mechanical Sciences*, No.41, pp.337-355. (SCI, 0.873, EI)
106. Huang, Chao-Ming, **Yen, Jia-Yush**, 1999 "Servo design for a high precision magnetic levitation linear bearing based on approximate input-output feedback linearization," *Journal of Control System and Technology*, Vol.6, No.3, pp. 1357- 1267. (EI) (**Best Paper Award 1999**).
107. Wu, Gwo-Huei and **Yen, Jia-Yush**, 1998, "A novel track accessing servo design for a dual actuator system," *Bulletin of the College of Engineering*, N.T.U., No.74, Oct., pp.155-165.
108. Chen, Yung-Yaw, Shieh, Ming-Jium, **Yen, Jia-Yush**, Chen, Chi-Hung and Lin, Win-Li, 1998, "Estimation of ultrasound transducer and tissue parameters with artificial neural network," *Chinese Journal of Medical and Biological Engineering*, Vol.18, No.2, June, pp.129-137. (EI)
109. Ho, S.C., **Yen, J.Y.**, 1998, "A Path-Following Control Algorithm For Manufacturing Systems Based Upon The Decomposed Contour Error," *The Chinese Journal of Mechanics*, Vol.14, No.1, March, pp.49-55. (SCI, 0.312, 89/106, EI)
110. Chen, S.L., **Yen, J.Y.**, and Huang, M.C., 1998, "An experimental investigation of ejector performance based upon different refrigerants," *ASHRAE Transactions*, Vol.104, Pt.2., paper No. 4193, July. (EI)
111. Lin, W.L., **Yen, J.Y.**, Chen, Y.Y., Cheng, K.S. and Shieh, M.J., "Specific absorption rate ratio patterns of cylindrical ultrasound transducers for breast tumors," *Medical Physics*, Vol.25, No.6, June, pp. 1041-8, 1998. (SCI, 3.81, 13/90), (NSC 86-2213-E-002-033).
112. **Yen, J.Y.** and Tsai, S.Z., 1997, "A Trajectory Feedback Control for the Computer Disk File Track Accessing/Following Servo," *IEEE Transactions on Industrial Electronics*, Vol.44, No.5, Oct., pp. 739-741, (SCI, 0.816, 17/47, EI)
113. **Yen, J.Y.**, Li, C.H., 1997, "A Multi-Variable Fuzzy Controller Design For An Optical Disk File Compound Actuator Servo," *Journal of Chinese Fuzzy Systems Association*, Vol.4, No.1, 1997. (Inspec)
114. **Yen, J.Y.**, Chen, P.H. and Chen, J.L., 1997, "An artificial neural network for double exposure PIV image analysis," *Experiments in Fluids*, Vol.24, pp.373-374 (SCI, 0.757, 26/106, EI).
115. **Yen, J.Y.**, Huang, C.J. and Lu, S.S., 1997, "Stability of PDF Controller with a Stick-Slip Friction Drive Device," *ASMS Transactions on Dynamic Systems, Measurements and Control*, Vol.119, Sep., pp. 486-490. (SCI, 0.485, 28/47, EI)
116. **Yen, J.Y.**, Tsai, S.Z., 1997, "The practical implementation of a trajectory feedback control algorithm for a low cost computer disk drive servo," *Journal of Control Systems and Technology*, Vol.5, No.2, pp. 117-120. (EI)
117. Chen, Y.Y., Shieh, M.J., **Yen, J.Y.**, Chen, C.H., Lin, W.L., "Modeling of ultrasound temperature distribution with artificial neural network," *Chinese Journal of Medical and Biological Engineering*, Vol.17, No.4, Dec., pp.249-255, 1997. (EI, Inspec), (NSC 86-2213-E-002-033).
118. **Yen, J.Y.**, Jin, K.W., Chen, Y.Y. and Lin, W.L., 1997, "Control of intensity field for ultrasound hyperthermia," *Chinese Journal of Medical and Biological Engineering*, Vol.17, No.3, Sep., (EI, Inspec), (NSC 86-2213-E-002-033).
119. Chen, Y.Y., Lin, W.L., Lu, D.C., **Yen, J.Y.**, 1997, "Inverse estimation of transducer parameters with artificial neural network for ultrasound hyperthermia," *Biomedical Engineering- Applications, Basis & Communications*, Vol.9, pp. 198-208, (EI, Inspec, ISI), (NSC 86-2213-E-002-033).
120. Lin, W.L., Chen, Y.Y., **Yen, J.Y.**, Shieh, M.J. and Chang, C.J., 1997, "Power intensity patterns of an annular array ultrasound transducer used in intracavitary hyperthermia," *Biomedical Engineering-Applications, Basis & Communications*, Vol.9, pp. 252-260, (EI, Inspec, ISI), (NSC 86-2213-E-002-

033).

121. Chen, S.L., Jwo, C.S., Yang, B.S. and **Yen, J.Y.**, 1997, "Theoretical and experimental investigations of a packaged ice-storage air-conditioning system," *Journal of Chinese Society of Mechanical Engineers*, Vol.18, No.5, pp. 445-457, (EI, Inspec)
122. Huang, C.H. **Yen, J.Y.** Ouhyoung M., 1996, "The Design of a Low Cost Motion Chair for Video Games And MPEG Video Playback," *IEEE Transactions on Consumer Electronics*, Vol.42, No.4, Nov., pp.991-997, (SCI, 0.428, 137/205, EI)
123. Lin, W.L., **Yen, J.Y.**, Chen, Y.Y., Wang, C.Y., and Kuo, T.S., 1996, "The development of ultrasound hyperthermia in Taiwan," *Japan Journal of Hyperthermic Oncology*, Vol.12, No.3, pp.224. (NSC 84-0420-E-002-004), (NSC 85-2213-E-002-033).
124. **Yen, J.Y.**, Jang, C.S., Fan, K.C., 1996, "Servo design for a 3D laser tracking measurement system," *ASME Journal of Dynamic Systems, Measurement, and Control*, Vol.118, No.3, Sep., pp.476-481, (SCI, 0.485, 28/47, EI)
125. Lin, W.L., **Yen, J.Y.**, Jin, K.W., Lin, S.Y. and Kuo, T.S., 1996, "Development of an Ultrasound Heating System for Localized Hyperthermia Treatments," *Journal of Medical Ultrasound*, Vol.4, No.3, Sep., pp.39.
126. Lin, W.L., **Yen, J.Y.**, Chang, C.J., Lin, S.Y. and Shieh, M.J., 1996, "Effects of Amplitude on the Power Intensity Distribution of an Annular Array Ultrasound Transducer Used in Intracavitary Hyperthermia," *Biomedical Engineering- Applications, Basis & Communications*, Vol.8, No.2, April, pp.63-72. (EI, Inspec, ISI)
127. Huang, C.J., **Yen, J.Y.**, Ou, C.C., and Lu, S.S., 1996, "Combination of TTDD and PDF control for backlashless operation," *Bulletin of the College of Engineering, N.T.U.*, No.66, Feb., pp.1-11.
128. Lin, W.L., Lin, S.Y., Shieh, M.J., **Yen, J.Y.**, and Wang, C.Y., 1995, "Heating patterns for ultrasonic endoscopic hemostasis," *Biomedical Engineering- Applications, Basis & Communications*, Vol.7, No.6, Dec. pp.603-610. (EI, Inspec, ISI), (NSC 83-0420-E-002-011), (NSC 84-0420-E-002-004).
129. **Yen Jia-Yush**, Chang Jeng-Yeh, Wang Whei-Li, and Jeng Wen-Hong, 1995, "An analysis of the Fly-height characteristics in a magnetic tape drive," *Bulletin of the College of Engineering*, N.T.U., No.65, Oct. pp.69-84.
130. Hwang, T.Y., **Yen, J.Y.** and Lu, S.S., 1995, "Bang-bang based fuzzy controller for time optimal and minimum chattering servo systems," *Electric Machines and Power Systems*, Vol.23, No.1, Jan., pp.25-35, (SCI, 0.130, EI)
131. **Yen, J.Y.**, Chao, W.C., and Lu, S.S., "A fuzzy cell mapping method for a time sub-optimal control implementation," *IFAC Journal of Control Engineering Practice*, **2**(2), 247-254, 1994 (SCI, 0.536, 27/47, EI) (NSC83-0422-E-002-007)
132. **Yen, J.Y.**, Wang, F.J. and Chen, Y.Y., 1993, "A fuzzy scheduling controller for a computer disk file track-following servo," *IEEE Transaction on Industrial Electronics*, Vol.40, No.2, April, pp.266-272, (SCI, 5.468, 2/229) (NSC 80-0401-E-002-14)
133. **Yen, J.-Y.**, Hallamasek, K. and Horowitz, R., "Track-following controller design for a compound disk drive actuator," *ASME Journal of Dynamic Systems, Measurement and Control*, **112**, Sep., 391-402, 1990, (SCI, 0.753, 36/53) (PhD Thesis)

B. Conference full papers

1. Chiang, S.-C., Huang, Y.-C., Shen, K., Yen, J.-Y., "An eight degree-of-freedom robotic endoscope holder," (2019) *2018 International Automatic Control Conference, CACS* 2018, DOI: 10.1109/CACS.2018.8606736
2. Chien, C.-C., Chang, Y.-F., Ho, M.-C., Yen, J.-Y., Chen, Y.-Y., "Computation of liver deformations with finite element model," (2018) *2017 International Automatic Control Conference, CACS* 2017, 2017-November, pp. 1-6. DOI: 10.1109/CACS.2017.8284271

3. Liao, Y.-T., Chen, C.-Y., Yen, J.-Y., Ho, M.-C., Chen, Y.-Y., "Comparison of the Control Designs of an Human Co-Working Endoscope Holder," (2018) *MED 2018 - 26th Mediterranean Conference on Control and Automation*, Paper No.: 8443068, pp. 631-636. DOI: 10.1109/MED.2018.8443068
4. Ma, Z.-H., Liu, Z.-X., Ho, M.-C., Yen, J.-Y., Chen, Y.-Y., "Long range gaze estimation with multiple near-infrared emitters," (2018) *2017 International Automatic Control Conference, CACS* 2017, 2017-November, pp. 1-5. DOI: 10.1109/CACS.2017.8284270
5. Liu, S.T., Liao, Y.T., Yen, J.Y., Chen, Y.Y., Lian, F.L., Ho, M.C., "Improvement of harmonic dissector for minimal invasive surgery, modeling and the stiffness identification of the clipped object," (2016) CACS 2015 - 2015 *CACS International Automatic Control Conference*, Paper No. 7378371, pp. 91-95. DOI: 10.1109/CACS.2015.7378371
6. Hsu, W.-J., Ho, M.-C., Lian, F.-L., Yen, J.-Y., Lin, W.-L., Chen, Y.-Y., "Computation of liver deformations for minimally invasive surgery," (2016) CACS 2015 - 2015 *CACS International Automatic Control Conference*, Paper No. 7378357, pp. 7-12. DOI: 10.1109/CACS.2015.7378357
7. Ching-Jen Chen; Weng, Wen-Pin; Jun-Ji Lin; Jia-Yush Yen, "Analysis and design of the additive manufacturing process for artificial cornea", The 4th Seoul International Conference on Applied Science and Engineering (SICASE 2016), Seoul, South Korea, July 5-7, 2016.
8. Wang, Fu-Cheng; Chen, Hsuan-Tsung; Chou, Ming-Cheng; Yen, Jia-Yush, "Multivariable fixed-order robust control for a PEMFC system," (2014) *2009 European Control Conference, ECC 2009*, Paper No. 7075057, pp. 4187-4192, March 26, 2015.
9. Yu, Y.L., Chao, Y.T., Yen, J.Y., "A novel home-ventilation soundproof structure design based on nature-landscape model," (2015) *Innovation in Design, Communication and Engineering - Proceedings of the 3rd International Conference on Innovation, Communication and Engineering, ICICE 2014*, pp. 675-679.
10. Cao, H.-J., Huang, C.-J., Shih, P.-J., Wang, I.-J., Yen, J.-Y., "A method of measuring corneal young's modulus," (2015) *IFMBE Proceedings*, 52, pp. 47-50. DOI: 10.1007/978-3-319-19452-3_13
11. Chao, Y.T., Yu, Y.L., Yen, J.Y., Li, K., Lo, Y.C., Liao, Y.T., Lee, L.C., "Design of an advanced retractable multi-speaker headphone," (2015) *Innovation in Design, Communication and Engineering - Proceedings of the 3rd International Conference on Innovation, Communication and Engineering, ICICE 2014*, pp. 659-663.
12. Chen, Y.Y., Wu, R.C., Wang, F.C., Yen, J.Y., "Sensor layouts for a long-stroke nano-positioning stage," (2014) *Proceedings of the SICE Annual Conference*, Paper No. 6935203, pp. 432-437. (Times cited: 1), DOI: 10.1109/SICE.2014.6935203
13. Yu, Y.L., Chao, Y.T., Yen, J.Y., Hsu, C.J., Kam, M., Ho, M.C., Chen, Y.Y., Lian, F.L., "A novel application for enlarge focus area based on High Intensity Focused Ultrasound (HIFU) probe with a high directivity structure design," (2014) *Innovation, Communication and Engineering - Proceedings of the 2nd International Conference on Innovation, Communication and Engineering, ICICE 2013*, pp. 409-412.
14. Chao, Y.T., Yu, Y.L., Yen, J.Y., Kam, M., Hsu, C.J., Liu, S.T., Ho, M.C., Chen, Y.Y., Lian, F.L., "Dynamics stress analysis for a high rigidity bendable Minimal Invasive surgical (MIS) instrument design," (2014) *Innovation, Communication and Engineering - Proceedings of the 2nd International Conference on Innovation, Communication and Engineering, ICICE 2013*, pp. 413-416.
15. Yu, Ya Lin; Chao, Yu Tin; Yen, Jia-Yush; Hsu, Che Jung; Kam, Micheal; Ho, Ming Chih; Chen, Yung Yaw; Lian, Feng Li, "A novel application for enlarge focus area based on High Intensity Focused Ultrasound (HIFU) probe with a high directivity structure design," *Innovation, Communication and Engineering - Proceedings of the 2nd International Conference on Innovation, Communication and Engineering, ICICE 2013*, p 409-412, 2014.
16. Chao, Yu Tin; Yu, Ya Lin; Yen, Jia Yush; Kam, Micheal; Hsu, Che Jung; Liu, Shih Tang; Ho, Ming Chih; Chen, Yung Yaw; Lian, Feng Li, "Dynamics stress analysis for a high rigidity bendable Minimal Invasive surgical (MIS) instrument design," *Innovation, Communication and Engineering -*

Proceedings of the 2nd International Conference on Innovation, Communication and Engineering, ICICE 2013, p 413-416, 2014.
17. Kuo, Fu-Tsun; Western, Craig; Yen, Jia-Yush, "Development of a system for mapping of thrust ripple induced by PMLSM drives in a single-deck, dual-axis precision stage," *Proceedings of the International Conference on Optimisation of Electrical and Electronic Equipment, OPTIM*, p 1113-1119, 2012.
18. Ke, Ming-Chun; Tseng, Yen-Hsiang; Chen, Cheng-Wei; Ho, Ming-Chih; Lian, Feng-Li; Yen, Jia-Yush; Lin, Win-Li; Chen, Yung-Yaw, "Preliminary study of intracorporeal localization for endoscopy tracking," *2013 CACS International Automatic Control Conference, CACS 2013 - Conference Digest*, p 130-134, 2013
19. Chao, Yu-Tin; Yu, Ya-Lin; Yen, Jia-Yush; Hsu, Che-Jung; Kam, Michael; Liu, Shih Tang; Ho, Ming-Chih; Chen,Yung-Yaw; Lian, Feng-Li, "A novel design of high intensity focus ultrasound (HIFU) for enlarged focus area application," *Proceedings of the IASTED International Conference on Modelling and Simulation*, p231-236, 2013.
20. Chao, Yu-Tin; Yu, Ya-Lin; Yen, Jia-Yush; Hsu, Che-Jung; Kam, Michael; Ho, Ming-Chih; Chen, Yung-Yaw; Fang, Jiunn; Lian, Feng-Li, "Dynamics stress analysis for a minimal invasive scalpel design," *Proceedings of the IASTED International Conference on Modelling and Simulation*, p34-38, 2013.
21. Wang, Fu-Cheng; Tsai, Yan-Chen; Wu, Ru-Chang; Yen, Jia-Yush, "Precision robust control for a three dimensional PZT stage," *Proceedings of the SICE Annual Conference*, p 474-479, 2013.
22. Lin, Ching-Kai; Lin, Feng-Chih; Lian, Feng-Li; Chang, Kai-Hsiang; Ho, Ming-Chih; Yen, Jia-Yush; Chen, Yung-Yaw, "Ultrasound image-guided algorithms for tracking liver motion," *IEEE/ASME International Conference on Advanced Intelligent Mechatronics, AIM*, p 51-56, 2012.
23. Jia-Yush Yen, Lien-Sheng Chen, Pablo Chiu, "Line Stitching in Servo-assisted Electron Beam Lithography System," *IEEE/ASME International Conference on Advanced Intelligent Mechatronics*, AIM, 2011.
24. Cheng-Ju Wu, Yi-Hung Kuo, Kai-Chen Kuo, Jia-Yush Yen, "Design and implementation of a repeatable standardized toroidal frame for the magnetic properties testing at high temperature," *Proceedings of 20th Soft Magnetic Materials Conference*, Kos, Island, Greece, Sep. 18-22, 2011.
25. Cheng-Ju Wu, Yi-Hung Kuo, Jia-Yush Yen, "Influence of modulation index for iron losses of laminated silicon-steel sheets under PWM voltage waveform," *Proceedings of 20th Soft Magnetic Materials Conference*, Kos, Island, Greece, Sep. 18-22, 2011.
26. Kai-Chen Kuo, Cheng-Ju Wu, Zuo-Tin Wong, Jia-Yush Yen, Liu-Shu Lin, "Comparison of Iron Loss Measurements and Texture Analysis of Silicon Steel Based on Tests using a Standardized Toroidal Frame and the Epstein Frame," *Proceedings of 2011 International Magnetics Conference (INTERMAG2011)*, April 26-29, 2011, Taipei, TAIWAN, CD ROM file GN-12.pdf, Abstract Proceedings, pp. 233, 2011.
27. Ping-Kun Lee, Kai-Chen Kuo, Cheng-Ju Wu*, Zuo-Tin Wong, Jia-Yush Yen, "Prediction of Iron Losses Using the Modified Steinmetz Equation under the Sinusoidal Waveform," *Proceedings of 2011 8th Asian Control Conference, ASCC 2011*, pp. 579-584, 2011.
28. Chung, Tien-Tung; Chu, Chih-Hsiang; Chian, Hsun-Fu; Huang, Cheng; Fan, Kuang-Chao; Yen, Jia-Yush; Szu, Kou-I, "Structural design and analysis of a nano-positioning planar motion stage," *Proceedings of the World Congress on Intelligent Control and Automation (WCICA)*, p 833-838, 2011.
29. Yen-Ting Kuo, Lien-Sheng Chen, Chin-Te Lin, Pei-Chun Chen , Jia-Yush Yen, Tien-Tung Chungm, "A Sub-Micron Roller manufacturing Machine for Nano-Imprint Lithography," *The International Conference on NanoPhotonics* 2010, May 30 – June 3, 2010, EPOCAL TSUKUBA, Tsukuba, Japap.
30. Chung, Tien-Tung; Chu, Chih-Hsiang; Fan, Kuang-Chao; Yen, Jia-Yush; Szu, Kou-I, "Development of a nano-positioning planar motion stage," *ICMEE 2010 - 2010 2nd International Conference on Mechanical and Electronics Engineering*, Proceedings, v 1, p V1122-V1126, 2010.
31. Su, Ming-Shing; Tsai, Kuen-Yu; Lu, Yi-Chang; Kuo, Yu-Hsuan; Pei, Ting-Hang; Yen, Jia-Yush,

"Architecture for next generation massively parallel maskless lithography system (MPML2)," *Proceedings of SPIE - The International Society for Optical Engineering*, v 7637, 2010, Alternative Lithographic Technologies II

32. Lin, Liu-Hsu; Wang, Fu-Cheng; Yen, Jia-Yush, "Robust PID controller design using particle swarm optimization, *Proceedings of 2009 7th Asian Control Conference*, ASCC 2009, p 1673-1678, 2009, Proceedings of 2009 7th Asian Control Conference, ASCC 2009
33. Yen, Jia-Yush; Chen, Cheng-Hung; Chen, Lien-Sheng; Tsai, Kuen-Yu; Chang, Shuo-Hung, "Hybrid servo design for large area nano pattern stitching," *IEEE/ASME International Conference on Advanced Intelligent Mechatronics*, AIM, p 1572-1576, 2009, 2009 IEEE/ASME International Conference on Advanced Intelligent Mechatronics, AIM 2009
34. Chen, Sheng-Yung; Tsai, Kuen-Yu; Ng, Hoi-Tou; Fan, Chi-Hsiang; Pei, Ting-Hang; Kuan, Chieh-Hsiung; Chen, Yung-Yaw; Yen, Jia-Yush, "Preliminary design of a two-dimensional electron beam position monitor system for multiple-electron-beam-direct-write lithography," *Proceedings of SPIE - The International Society for Optical Engineering*, v 7520, 2009, Lithography Asia 2009
35. Jia-Yush Yen, Cheng-Hung Chen, Lien-Sheng Chen, Kuen-Yu Tsai, Shuo-Hung Chang, "Hybrid Servo Design for Large Area Nano Pattern Stitching, " International Conference on Advanced Intelligent Mechatronics, Singapore, Jul. 14-17, 2009.
36. Lien-Sheng Chen, Jia-Yush Yen, Yea-Chin Yeh, Yu-Cian Chang, Pablo Chiu, "High Accuracy Positioning Stage for an E-Beam Lithography System," Proceedings of 2009 CACS International Automatic Control Conference, Taiwan, Nov. 27-29, 2009.
37. Tito Lu Tang Chen, Sz-Lung Chen, Shu-Hung Liu, Jia-Yush Yen, "Design, Fabrication and Unconventional Serpenoid Motion Control of a Biomimetic Snake-like Robot," Proceedings of 2009 CACS International Automatic Control Conference, Taiwan, Nov. 27-29, 2009.
38. Y. Lai, K. Kuo, C.Wu, J.Yen and C. Chou, "Design of Multi-Function PWM Inverter Applied to Analysis of Core Loss under Non-Sinusoidal Waveforms," Proceedings of the IEEE International Magnetics Conference, 2009.
39. Chen, Sheng-Yung; Tsai, Kuen-Yu; Ng, Hoi-Tou; Fan, Chi-Hsiang; Pei, Ting-Hang; Kuan, Chieh-Hsiung; Chen, Yung-Yaw; Yen, Jia-Yush; "Preliminary design of a two-dimensional electron beam position monitor system for multiple-electron-beam-direct-write lithography," Proceedings of SPIE - The International *Society for Optical Engineering*, v 7520, 2009, Lithography Asia 2009
40. Chen, Sheng-Yung; Tsai, KueTito Lu Tang Chen, Shu-Hung Liu, Jia-Yush Yen, "A Bio-mimetic Snake-like Robot: Sensor Based Gait Control," IEEE Workshop on Advanced Robotics and its Social Impacts (ARSO), Taiwan, 2008.
41. Fu-Tsun Kuo, Jia-Yush Yen, Yea-Chin Yeh, Po-Jyun Lee, Yu-Cian Chang, "A Precise Multi-Axis Piezo-positioning Stage Control," Proceedings of 2008 CACS International Automatic Control Conference, Taiwan, Nov. 21-23, 2008.
42. Chen, Cheng-Hung; Yen, Jia-Yush; Chen, Lien-Sheng; Chang, Shuo-Hung; "Stitching technology using hybrid actuators in nano imprint," *2008 Proceedings of the ASME International Design Engineering Technical Conferences and Computers and Information in Engineering Conference, DETC 2008*, v 4, p 683-687, 2009, 2008
43. Luo, Ren C.; Yen, Jia-Yush; "Welcome message," *IEEE International Conference on Advanced Robotics and its Social Impacts, ARSO 2008*, p I, 2008
44. Tito Lu Tang Chen, Shu-Hung Liu, Jia-Yush Yen, "A Bio-mimetic Snake-like Robot: Sensor Based Gait Control," *IEEE International Conference on Advanced Robotics and its Social Impacts*, Aug. 23-25, Taipei, Taiwan, 2008.
45. Shu-Hung Liu, Tse-Shih Huang and Jia-Yush Yen, "Sensor Fusion in a SMA-based Hexapod Bio-mimetic Robot," *IEEE International Conference on Advanced Robotics and its Social Impacts*, Aug. 23-25, Taipei, Taiwan, 2008.
46. Yen, JY, M. Liu, J. Fan, C. Liu, "Recent development on Engineering Design Education in Taiwan," *Invited Talk*, NABEEA General Assembly and JABEE Symposium on Engineering Education, Sep. 3-

4, Sapporo, Japan, 2008.

47. Fu-Cheng Wang, Hsuan-Tsung Chen, Jia-Yush Yen, "Multivariable LQG Control of a Proton Exchange Membrane Fuel Cell System," *Proceedings of the 17th World Congress*, The International Federation of Automatic Control, Seoul, Korea, July 6-11, 2008, P10995.
48. Liu, Shu-Hung; Yen, Jia-Yush; Chen, Yi-Ting; "Sensor fusion in a six-legged bio-mimicking robot," *IFAC Proceedings Volumes* (IFAC-PapersOnline), v 17, n 1, 2008, Proceedings of the 17th World Congress, International Federation of Automatic Control, IFAC, P15624.
49. Yea-Chin Yeh, Jia-Yush Yen, Chih-Kai Shiao, "A Study on Sliding Mode Control with Hysteresis Compensation Model for a Piezo-positioning Stage Used in E-beam Lithography System," Proceedings of 2007 CACS International Automatic Control Conference, Taiwan, Nov. 9-11, 2007.
50. Shu-Hung Liu, Jia-Yush Yen, Tito Lu Tang Chen, "A Novel Actuation Mechanism Design for the Snake Robot," Proceedings of 2007 CACS International Automatic Control Conference, Taiwan, Nov. 9-11, 2007.
51. Yen, Jia-Yush, Lee, Ye-Ling, Lai, Yi-Chih, "A single deck 2D magnet levitation platform," *2007 IEEE/ASME International Conference on Advanced Intelligent Mechatronics*, AIM, Zurich, Swiss, 9/4 ~ 8, 2007, p 4412538
52. Y.L. Lee and J.Y. Yen, "Design and Servo Control of a Single-Deck Planar Maglev Stage," *10th Joint MMM-INTERMAG Conference*, January 7-11, 2007, Baltimore, USA.
53. Su-Hong Liu, Jia-Yush Yen, "Sensor fusion in a Six-legged Bio-mimicking Robot," *Proceedings of IFAC Mechatronics 2006- 4th IFAC Symposium on Mechatronic Systems*, Heidelberg, Germany, 9/12~16, 2006
    Also, attended TC4.2 Technical Committee for Mechatronics TC Meeting (Now in charge of IFAC TC4.2 website)
54. C. E. Tseng, J. Y. Yen, and W. C. Chang, "A Sub-band Spectral Analysis for Electrocardiography," *2006 IEEE International Conference on System, Man and Cybernetics*, Oct. 8~10, Grand Hotel, Taipei, Taiwan, 2006.
55. Y.C. Lai, Y.L. Lee and J.Y. Yen, "Design and Implementation of a Novel Triangular Planar Maglev System," *INTERMAG 2006 Conference*, May 8-12, 2006 San Diego, US.
56. Shu-Hung Liu, Jia-Yush Yen, "A HEXAPOD ROBOT BASED ON SHAPE MEMORY ALLOY ACTUATORS," *4th IFAC-Symposium on Mechatronic Systems*, September 12-14, 2006, Heidelberg, Germany, Proceedings of MECHATRONICS 2006 – 4th IFAC-Symposium on Mechatronic Systems, pp689-693, Heidelberg, Germany, 2006
57. Chih-Ching Wu, Yao-Shen Tung, Hao-Li Liu, Wen-Shiang Chen, Win-Li Lin, Jia-Yush Yen, "In-vitro and In-vivo Investigation of Contrast-agent Enhanced Ultrasound Thermal Ablation," *11th Congress of the World Federation for Ultrasound in Medicine and Biology*, 2006.5.28~2006.6.1, Seoul, Korea, 2006, *Ultrasound in medicine & biology*, 32, no. 5, (2006): 110
58. Yea-Chin Yeh, Chun-Hung Liu, Kuen-Yu Tsai, Jia-Yush Yen, Yu-Chen Kung, Arthur Tay, Jyh-Fa Lee, "IDENTIFICATIONS OF THE PZT ACTUATED NOVEL OPTICAL SCANNING SYSTEM /FEEDBACK CONTROL OF PIEZO-BASED NANOPOSITIONING SYSTEMS FOR SEMICONDUCTOR MANUFACTURING," *IFAC workshop on Advanced Process Control for Semiconductor Manufacturing*, Dec. 04-05, 2006, Furuma Hotel, Singapore, Proceedings of IFAC
59. Yea-Chin Yeh, Jia-Yush Yen, Jyh-Fa Lee, Wei-Chien Tu, "The Application of the No-reset Iterative Learning Control on a Novel Optical Scanning System," *International Symposium on Precision Mechanical Measurements*, August 2-6, 2006 Urumqi, Xinjiang , China.
60. Wei-Li Chuang, Jia-Yush Yen, "Study Three D.O.F. Vehicle Dynamics and Lane Keeping Control Problems," *Proceedings of AVEC 2006 The 8th International Symposium on Advanced Vehicle Control*, August 20-24, 2006 Taipei, Taiwan, AVEC060090.
61. Lai, Y.C., Yen, J.Y., "Design and implementation of a novel 6-DOF planar maglev positioning system," INTERMAG ASIA 2005: Digests of the IEEE International Magnetics Conference, INTERMAG ASIA 2005: Digests of the IEEE International Magnetics Conference, 2005, p 724.

62. Yen, J.Y., Chang, G.S., "Control Design for 2D SPM Lithography," Proceedings 2005 IFAC, Prague, Zech Republic, 2005.
63. Yen, Jia-Yush, Ouyang, Ko-Hsin, "Robust control in the three-dimensional optical pickup head for optical disk drive," *Proceedings of SPIE - The International Society for Optical Engineering*, v 5643, Advances in Optical Data Storage Technology, 2005, p 396-407.
64. Chen, Cheng-Hung, Yen, Jia-Yush, "A new optical disk driver fine seek algorithm based on runout learning," Proceedings of SPIE - The International Society for Optical Engineering, v 5643, Advances in Optical Data Storage Technology, 2005, p 434-442
65. Chen, Cheng-Hung, Yen, Jia-Yush; Huang, Chung-Yin; Lo, Feng-Hsiang, "A general purpose development kit for optical storage system design," Proceedings of SPIE - The International Society for Optical Engineering, v 5643, Advances in Optical Data Storage Technology, 2005, p 443-451
66. S. H. Liu, J. Y. Yen, A bio-mimetic hexapod robot powered by shape memory alloy actuators, *CACS 2005 Automatic Control Conference*, Nov. 18-19 2005, Tainan, Taiwan, R.O.C, T00016i, Proceedings of 2005 CACS Automatic Control Conference, Tainan, Taiwan, Nov 18-19, 2005.
67. Yeh, Yea-Chin; Yen, Jia-Yush; Lee, Jyh-Fa; Peng, Yung-Hao, "A novel high speed optical scanning platform," *Proceedings of SPIE - The International Society for Optical Engineering*, v 5638, n PART 1, Optical Design and Testing II, 2005, p 352-361
68. Chih-Hui Lee, Kai-Lun Chang, Jia-Yush Yen, Jyh-Jone Lee, Yuna-Hwa Lee, Yung-Yaw Chen, "A Novel Roundness Test Machine Based on an Active Stylus Probe," *ISPMM'2004 The First International Symposium on Precision Mechanical Measurements*, Aug. 24-28, Beijing, China, 2004.
69. Jia-Yush Yen, Ruey-Jeng Lee, "A SOLID MODELING BASED MECHATRONICS APPROACH TO MACHINE TOOL SERVO DESIGN," *Proceedings of 2004 Conference on Control Applications*, Sep. 1-3, Taipei, Taiwan, 2004.
70. I-Ming Lin, Jia-Yush Yen, "Servo Design for A SPM Lithography System," *Proceedings of the 2004 American Control Conference*, June 30 - July 2, Boston, Massachusetts, 2004.
71. P.F. Chang, C.H. Kao, C.L. Ho, J.Y. Yen, A.M. Wo and Y.B. Yang, "The integrated strategies and implementing processes of the accreditation criteria in Taiwan," *2004 International conference on Engineering Education and Research*, Ostrava, ISSN 1562-3580, 2004.
72. Y. C. Lai and **J. Y. Yen**, "A RESEARCH IN THE APPLICATION OF PERMANENT MAGNETS AND SOLENOIDS TO THE PLANAR MAGLEV SYSTEM DESIGN," *Proceedings INTERNATIONAL MAGNETICS CONFERENCE, IEEE InterMAG*., BOSTON MARRIOT COPLEY PLACE, BOSTON, MASSACHUSETTS, MARCH 28 - APRIL 3, 2003.
73. Yi-Chih Lai and **Jia-Yush Yen**, "Application of moving magnets and solenoids to a novel planar maglev system design," *Proceedings 2003 International Symposium on Advanced Magnetic Technologies, ISAMT'03*, Nov.13~16, Taipei, Taiwan, pp.111.
74. Wu, W.F., P.H. Chen, **J.Y. Yen**, S.H. Chang, "MEMS and nano-technology related researches at mechanical engineering department of National Taiwan University," *The Second Japap-Taiwan Workshop on Mechanical and Aerospace Engineering*, Tokyo Institute of Technology & Tohoku University, Oct. 17 & 20, 2003.
75. **Jia-Yush Yen**, Yang-Lin Chen, Masayoshi Tomizuka, "VARIABLE SAMPLING RATE CONTROLLER DESIGN FOR BRUSHLESS DC MOTOR", Proceedings *41st IEEE Conference on Decision and Control*, Las Vegas, Nevada, USA, Dec. 10 – 13, 2002.
76. **Yen, Jia-Yush** and Hui-Man Chang, 2002, "PERFORMANCE ROBUSTNESS AND STIFFNESS ANALYSIS ON A MACHINE TOOL SERVO DESIGN," to appear in *Proceedings 2nd IFAC Conference on Mechatronic Systems*, Dec., Berkeley, California, USA, 2002.
77. **Yen, Jia-Yush**, Gwo-Huei Wu, Yueh-Hsuan Tsai and Yung-Yaw Chen, 2002, "A MODEL BASED TRACK ACCESSING SERVO FOR OPTICAL DISK DRIVE WITH TRACK RUNOUT," *Proceedings 2002 IFAC*, July 21-24, Barcelona, Spain.
78. **Yen, Jia-Yush** and Jia-hua, Lin, 2001, "A mechatronics approach to the servo design for a maglev system," *Proceedings of 2001 American Control Conference*, June 25-27, Crystal Gateway Marriott,

Arlington, VA, USA, 29MA18-3.

79. Lun-Yu Kuo and **Jia-Yush Yen**, 2000, "A CNC controller tuning method based upon GA rules," *Proceedings of 2000 Eighth National Conference on Fuzzy Theory and Its Applications*, ORGIII-3, Dec. 2-3, Taipei, Taiwan.
80. **Yen, Jia-Yush**, Lu, Shu-Shung, Ho, Hsin-Chiang, 1998, "A decoupled path-following control algorithm based upon the decomposed trajectory error," *Proceedings of 37th Conference on Decision and Control*, Dec. 16-18, Tampa, Florida, U.S.A.
81. Chang, Ya-Hui and **Yen, Jia-Yush**, 1998, "Sliding mode control of high precision magnetic levitation system," *Proceedings of 1998 International Conference on Mechatronic Technology*, Nov.30-Dec.2, Hsinchu, Taiwan, R.O.C.
82. Lin, W.L., Shieh, M.J., Chen, Y.Y., and **Yen, J.Y.**, 1998, "Ultrasound heating technology," *Proceedings of the 2nd Congress of the Asian Society for Hyperthermic Oncology*, (invited lecture) Tokyo, Japan, Sep., (*Japan Journal of Hyperthermic Oncology*, 1998, Vol.14, pp. S.24-45.)
83. Lin, W.L., Chen, Y.Y., **Yen, J.Y.**, 1998, "Technical consideration for advanced ultrasound hyperthermia system development," *Proceedings of 2nd congressioin of the Asian Society for Hyperthermic Oncology*, (Panel Lecture) Tokyo, Japan, Sep., (*Japan Journal of Hyperthermic Oncology*, 1998, Vol.14, pp.S.59-61.)
84. Liou, H.L., Lin, W.L., Chen, Y.Y., **Yen, J.Y.**, 1998, "Fuzzy logic control for ultrasound hyperthermia with refernce temperature based on objective functions," *Proceedings of 2nd congressioin of the Asian Society for Hyperthermic Oncology*, Tokyo, Japan, Sep., (*Japan Journal of Hyperthermic Oncology*, 1998, Vol.14, pp.S.134.)
85. Liau, C.T., Lin, W.L., **Yen, J.Y.**, Chen, Y.Y., 1998, "Theoretical study of intracavitary ultrasound hyperthermia," *Proceedings of 2nd congressioin of the Asian Society for Hyperthermic Oncology*, Tokyo, Japan, Sep., (*Japan Journal of Hyperthermic Oncology*, 1998, Vol.14, pp.S.135.)
86. Ju, K-C, Lin, W-L, Cheng, K-S., Chen, Y-Y, **Yen, J-Y,** 1998, "Temperature distributions of cylindrical ultrasound transducers for breast tumors," *Proceedings 5th Congress of the Asian Federation of Society for Ultrasound in Medicine and Biology*, Oct. 23-27, Taipei. (*Journal of Medical Ultrasound*, Vol.6, pp.357)
87. Liang, T-C, Lin, W-L, Fan, W-C, **Yen, J-Y**, Chen, Y-Y, 1998, "Simulation study of intracavitary ultrasound hyperthermia treatments," *Proceedings 5th Congress of the Asian Federation of Society for Ultrasound in Medicine and Biology*, Oct. 23-27, Taipei. (*Journal of Medical Ultrasound*, Vol.6, pp.357)
88. Liang, T-C, Lin, W-L, Fan, W-C, **Yen, J-Y**, Chen, Y-Y, 1998, "SAR and temperature distributions of cylindrical ultrasound transducers for intracavitary hyperthermia," *Proceedings – 20th Annual international Conference –IEEE/EMBS*, Oct. 29 – Nov. 1, Hong Kong, pp. 1742-1745.
89. Ju, K-C, Chen, Y-Y, **Yen, J-Y**, Cheng, K-S, Lin, W-L, 1998, "Heating patterns of cylindrical ultrasound transducers for breast tumors," *Proceedings – 20th Annual international Conference – IEEE/EMBS*, Oct. 29 – Nov. 1, Hong Kong, pp. 1746-1749.
90. Liu, H.L., Chen, Y.Y., Lin, W.L., Yen, J.Y., 1998, "Thermoprobe location analysis using objective functions in scanned focused ultrasound hyperthermia," *Proc. 1998 annual conference for BMES of ROC*, pp.312-313.
91. Liang, T.C., Lin, W.L., Fan, W.C., Yen, J.Y., Chen, Y.Y., 1998, "A simulation study of temperature and thermal dose distributions of cylindrical ultrasound transducers for intracavitary hyperthermia," *Proc. 1998 annual conference for BMES of ROC*, pp.394-395.
92. Liu, H.L., Lin, W.L., Chen, Y.Y., Yen, J.Y., 1998, "Analysis of thermoprobe location using treatment quality control in ultrasound hyperthermia," *Proc. 1998 annual conference for BMES of ROC*, pp.477-478.
93. Lin, W.L., Liauh, C.T., Chen, Y.Y., Yen, J.Y., Shieh, M.J., 1998, "Study of control prameters and tumor/bone conditions for external ultrasound hyperthermia," *Proc. 1998 annual conference for BMES of ROC*, pp.114-115.

94. Lin, W.L., **Yen, J.Y.**, Chen, Y.Y., and Shieh, M.J., 1997, "Treatable domain and optimal driving frequency for brain tumors during ultrasound hypothermia," *Proceedings of 16th Annual Meeting of European Society for Hyperthermic Oncology*, Berlin, Germany, pp. 102.
95. Fan, W.C., Lin, W.L., and **Yen, J.Y.**, 1997, "Study of parameter characteristics for ultrasound linear phased array via body cavities," *Proceedings of 9th Asian and Australian Conference of the ISSRRT*, Taipei, pp. 146.
96. Lin, W.L., **Yen, J.Y.**, Chen, Y.Y., and Shieh M.J., 1997, "SAR deposition paterns of ultrasound transducers for breast tumors," *Proceedings of 18th International Conference of Medical Biological Engineering and 11th International Conferency on Medical Physics*, Nice, France, Sep.,
97. Fan, W.C., Lin, W.L., Yen, J.Y., Chen, Y.Y. and Shieh, M.J., 1997, "Acoustic power control for linear phased arrays used in intracavitary hyperthermia," *Proceedings of 1997 Annual Conference for BMES of ROC*, pp.20-21.
98. Cheng, K.S., Lin, W.L., Yen, J.Y., Chen, Y.Y. and Shieh, M.J., 1997, "Optimal frequency and power absorption schema of ultrasound transducers for breast tumors," *Proceedings of 1997 Annual Conference for BMES of ROC*, pp.22-23.
99. Liou, H.L., Lin, W.L., Chen, Y.Y. and Yen, J.Y., 1997, "Cost function-based self-tuning fuzzy controller in ultrasound hyperthermia," *Proceedings of 1997 Annual Conference for BMES of ROC*, pp.296-297.
100. Chen, K.S., Lin, W.L., Yen, J.Y., Chen, Y.Y. and Shieh, M.J., 1997, "Evaluation of brain tumors treatment by using ultrasound transducers without craniotomy," *Proceedings of 1997 Annual Conference for BMES of ROC*, pp.296-297.
101. Yen, J.Y. and Tarng, S.W., 1996, "A fuzzy cell-mapping feedback control algorithm for the satellite attitude maneuvering control," *1996 Asian Fuzzy Systems Symposium*, Dec.11-14, Kenting, Taiwan, R.O.C., pp.567-572.
102. Lin, W.L., Yen, J.Y., Chen, Y.Y., Wang, C.Y. and Kuo, T.S., 1996, "The development of ultrasound hyperthermia in Taiwan," *Proceedings of 1st Conference of Asian Society of Hyperthermia Oncology and Proceeding of 13th Annual Conference of Japanese Society Hyperthermic Oncology*, pp.224.
103. Lin, W.L., Yen, J.Y., Jin, K.W., Lin, S.Y. and Kuo, T.S., 1996, "Development of an ultrasound heating system for localized hyperthermia treatments," Annual Convention of the Society of Ultrasound in Medicine of the R.O.C., Taipei, Taiwan, R.O.C., June, pp.39.
104. Huang, C. H., Yen, J. Y., Ouhyoun, M., 1996, "The design of a low cost motion chair for video games and MPEG video playback," Proceedings ICCE International Conference on Consumer Electronics, June 5-7.
105. Lin, Win-Li, Yen, Jia-Yush, Jin, Kuo-Wen, Lin, Shu-Yuh, and Lui, Louis T., 1996, "Relationship between acoustic window and tumor conditions for external ultrasound hyperthermia," VII International Congress on Hyperthermia Oncology, Roma, Italy, April 9-13, pp.376-379.
106. Huang, Chih-Jung, Yen, Jia-Yush, Lu Shu-Shung, 1995, "Stability of PDF controller with stick-slip friction device," Proceedings 1995 American Control Conference, Seattle, Washington, June 21-23.
107. Chang, Chia-Jong, Lin, Win-Li, Yen, Jia-Yush, Chen, Yung-Yaw, 1994, "Ultrasound power intesity distrubitions of annular array tranducer used in hyperthermia cancel therapy," Proceedings 中華民國八十三年度醫學工程科技研討會, Dec., pp.119-120.
108. Sinn-Cheng Lin, Yung-Yaw Chen, Jia-Yush Yen, and Hung-Wei Chen, 1994, "Intelligent Guidance System for Unmanned Flight Vehicle," The 2nd Natl. Conf. on Fuzzy Theory & Application, Taipei, pp.581-586.
109. Hwang,T.Y., Yen,J.Y. and Lu,S.S., 1993, "Fuzzy bang-bang controller for time optimal and minimum chattering servo systems," IFAC Congress 1993, Sydney, Australia, July 18-23,
110. Yen,J.Y.and Jeng,C.S., 1993, "Servo design for a 3D laser tracking measurement system," 1993 American Control Conference, San Francisco, CA, June 2-4, pp.
111. Yen,J.Y., Wang,F.J. and Chen,Y.Y., 1993, "A fuzzy scheduling controller for a computer disk file track-following servo," Proceedings FUZZY-IEEE IEEE Int. Conference on Fuzzy Systems, San

Francisco, CA, March 4-5.

112. Chao,W.C., Yen,J.Y. and Lu,S.S., 1992, "On the application of cell-to-cell mapping for optimal control," 1992 Japan-USA Symposium on Flexible Automation, San Francisco, CA, USA, July 13-15
113. Yen,J.Y., Chao,W.C. and Lu,S.S., 1992, "Computer disk file track accessing controller design based upon cell-to-cell mapping," 1992 American Control Conference, Chicago, Illinois, June 24-26.
114. Yen,J.Y., Chen,S.L. and Liang,H.S., 1992, "Dynamic fly height characteristics of a computer disk head slider(I)," Fourth Int. Symposium on Transport Phenomena and Dynamics of Rotating Machinery, Honolulu, Hawaii, April 5-9.
115. Yen,J.Y., Lin,C.S., Li,C.H. and Chen,Y.Y., 1992, "Servo controller design for an optical disk drive using fuzzy control algorithm," FUZZY-IEEE IEEE Int. Conference on Fuzzy Systems, San Diego, CA, March 8-12..
116. Yen,J.Y. and Horowitz,R., 1990, "Discrete-time H2 loop transfer recovery," 1989 ASME Winter Annual Meeting, San Francisco, CA, Dec. 10-15, ASME Paper No.89-WA/DSC-35.
117. Yen, J.-Y. and Liu, H.-W., 1990, "Forty Years of Bicycle Use Evolution in Taiwan The Republic of China," Asia Bicycle Conference, Tokyo, Japan, Nov. 6-10.
118. Yen,J.Y., Young,R.M., Stuart,P. and Pfender,E., 1985, "A new method for injection of particulated matter into high-intensity DC arcs," 7th Int. Symposium on Plasma Chemistry, Eindhoven, The Netherlands, July 1-5, pp.201-206.

C. Non-refereed papers

1. Ching-Jen Chen; Weng, Wen-Pin; Jun-Ji Lin; Jia-Yush Yen, " Analysis and design of the additive manufacturing process for artificial cornea", The 4th Seoul International Conference on Applied Science and Engineering (SICASE 2016), Seoul, South Korea, July 5-7, 2016.Shih-Yu Lin, Shang-Chin Chou, Wei-Lun Huang, I-Haur Tsai, Chia-Yun Tsai, Jia-Yush Yen, "The Needle Method for Measuring Iron Loss of Motor Stator in Revolving-Field", The 5th International Conference on Engineering and Applied Sciences (ICEAS 2015), Hokkaido, Japen, July 20-22, 2015.
2. Wei-Yu Lee, Chi-Ying Lee, Jia-Yush Yen, “A Novel Algorithm Using 4D Light Fields”, The 5th International Conference on Engineering and Applied Sciences (ICEAS 2015),Hokkaido, Japan. July 20-22, 2015.
3. Huei-Jyun Cao, Chun-Ju Huang, Po-Jen Shih, I-Jong Wang, Jia-Yush Yen, “A method of measuring corneal Young’s modulus” 7th WACBE World Congress on Bioengineering 2015, Singapore, 6 – 8 July, 2015. Volume 52 of the series IFMBE Proceedings pp 47-50.
4. Wang, Fu-Cheng; Chen, Hsuan-Tsung; Chou, Ming-Cheng; Yen, Jia-Yush, “Multivariable fixed-order robust control for a PEMFC system,” 2009 European Control Conference, ECC 2009, 23-26 August 2009, Budapest, Hungary, p 4187-4192, March 26, 2015

D. Books

1. Jia-Yush Yen, Mandy Liu, “Co-operating to Enhance Engineering Education in Asia,” in **Engineering Education: Transformation & Innovation an UNESCO Report**, RMIT Press, Sidney Australia, 2013
2. Chen, Yung-Yaw, Hirota Kaoro and **Yen, Jia-Yush**, (edited), 1996, **Soft Computing in Intelligent Systems and Information Processing: Proceedings of 1996 AFSS, IEEE Publishing**, IEEE Catalog Number 96TH8239, **ISBN 0-7803-3687-9** (softbound), **ISBN 0-7803-3688-7** (microfiche), **Library of Congress Number 96-78417**.