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研究成果目錄：

A. 期刊論文

1. **Yang, A. S.**, Wen, C. Y.*, Tseng, C. S. and Chang, H. T., “Parametric Study and Optimization of Helix Configuration in Ribbed Lip Seal,” Submitted to *Tribology International*, in review. (SCI/EI Journal)
2. **Yang, A. S.**, Wen, C. Y.*, Chiang, C. C., Tseng, L. Y. and Tseng, W. Y., “An Innovative Numerical Approach to Resolve the Pulse Wave Velocity in a Healthy Thoracic Aorta Model,” Submitted to *Computer Methods in Biomechanics and Biomedical Engineering*, in rebuttal. (SCI/EI Journal) (NSC96-2628-E-006-252-MY3)
3. **Yang, A. S.***, “Attitude-Adjustment-Induced Sloshing Characteristics in a Satellite Propellant Tank,” Accepted for publication in *Journal of Mechanics*, in press. (SCI/EI Journal, 2010 Impact factor=0.408, Ranking 112/132 (84.8%) MECHANICS) (NSC94-2212-E-212-009)

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4. Tseng, L. Y., **Yang, A. S.***, and Lin, J. C., “Study of a Crossflow over a Zero-net-mass-flux Synthetic Jet Driven by a Vibrating Diaphragm,” *Journal of Mechanics*, Vol. 27, No. 4, 2011. (SCI/EI Journal, 2010 Impact factor=0.408, Ranking 112/132 (84.8%) MECHANICS) (NSC97-2221-E-027-23-MY2)
5. Wen, C. Y., **Yang, A. S.***, Huang, F. J. and Chang, H. T., “New Deflected-helix Ribbed Lip Seal with Enhanced Sealing Performance,” *Tribology International*, Vol. 44, pp. 2067-2073, 2011. (SCI/EI Journal, 2010 Impact factor=1.557, Ranking 21/122 (17.2%) ENGINEERING, MECHANICAL)
6. Wu, Y. C., **Yang, A. S.***, Tseng, L. Y. and Liu, C. L., “Myth of Ecological Architecture Designs: Comparison between Design Concept and Computational Analysis Results of Natural-ventilation for Tjibaou Cultural Center in New Caledonia,” *Energy and Buildings*, Vol. 43, pp. 2788-2797, 2011. (SCI/EI Journal, 2010 Impact factor=2.041, Ranking 4/53 (7.5%) CONSTRUCTION & BUILDING TECHNOLOGY) (Reviewed comments: “The paper will be an important contribution to the field of architectural and building aerodynamics.”; “This paper is a very valuable contribution to the journal. The case study and the grid made by the authors are impressive.”; “The application of CFD to impressive case studies such as in this paper certainly is novel! Together with the ventilation study by van Hooff and Blocken (2010) for the ArenA stadium, this is the most elaborate CFD ventilation case study known to this reviewer.”)
7. Wen, C. Y., **Yang, A. S.***, Kuo, T. R., Tseng, L. Y. and Chai, J. W., “An Axial Velocity Profile Method to Derive the Aortic Pulse-Wave Velocity in Diabetic Patients,” *Journal of Mechanics*, Vol. 27, No. 3, pp. 447-452, 2011. (SCI/EI Journal, 2010 Impact factor=0.408, Ranking 112/132 (84.8%) MECHANICS) (NSC96-2628-E-006-252-MY3)
8. Lee, D. S., **Yang, A. S.***, Chen, P. H., Liu, C. L., Lin, C. P. and Tseng, L. Y., “Determination of RFID Sensor Locations for an Adapted Air-Conditioning System in a Conference Room,”

Advanced Science Letters, Vol. 4, No. 8, pp. 2790-2797, 2011. (SCI/EI Journal, 2010 Impact factor=1.253, Ranking 15/57 (26.3%) MULTIDISCIPLINARY SCIENCES) (NSC98-3114-E-002-002-CC2) (中國機械工程學會CSME第27屆全國學術研討會虎門科技ANSYS論文獎優選)

9. Tseng, L. Y., **Yang, A. S.***, Lee, C. Y. and Hsieh, C. Y., “CFD-based Optimization of a Diamond-Obstacles Inserted Micromixer with Boundary Protrusions,” *Engineering Applications of Computational Fluid Mechanics*, Vol. 5, No. 2, pp. 210-222, 2011. (SCI/EI Journal, 2010 Impact factor=0.360, Ranking 57/87(65.5%) ENGINEERING, MULTIDISCIPLINARY) (NSC99-2221-E-027-035)
10. Shih, Y. C., **Yang, A. S.*** and Lu, C. W., “Using Air Curtain to Control Pollutant Spreading for Emergency Management in a Cleanroom,” *Building and Environment*, Vol. 46, pp.1104-1114, 2011. (SCI/EI Journal, 2010 Impact factor=2.129, Ranking 3/53 (5.7%) CONSTRUCTION & BUILDING TECHNOLOGY) (台灣冷凍空調學會99年度「工程論文獎」)
11. Wen, C. Y., **Yang, A. S.***, Tseng, L. Y. and Tsai, W. L., “Flow Analysis of a Ribbed Helix Lip Seal with Consideration of Fluid-Structure Interaction,” *Computers & Fluids*, Vol. 40, pp. 324-332, 2011. (SCI/EI Journal, 2010 Impact factor=1.433, Ranking 39/132 (29.5%) MECHANICS).
12. Wang, W. C.*, Yang, C. H. and **Yang, A. S.**, “Acoustic Streaming Induced by Anti-symmetrical Flexural Modes near a Wedge Tip,” *2010 IEEE International Ultrasonics Symposium (IUS)*, 2010. (EI Journal) (NSC99-2212-E-027-02)
13. Shih, Y. C., **Yang, A. S.***, Lu, C. W. and Chen, C. W., “Automated Control Solution for Contaminant Dispersal in a Cleanroom,” *Proceedings of the 8th IEEE International Conference on Industrial Informatics*, pp. 34-39, 2010. (EI Journal)
14. Lin, C. J., Cheng, C. H. and **Yang, A. S.***, “Hybrid motion planning of a planar robot for a tracking problem with singularity,” *Proceedings of the 8th IEEE International Conference on Industrial Informatics*, pp. 505-510, 2010. (EI Journal) (NSC98-2221-E-212-022)
15. Wen, C. Y., **Yang, A. S.***, Tseng, L. Y. and Chai, J. W., “Investigation of Pulsatile Flowfield in Healthy Thoracic Aorta Models,” *Annals of Biomedical Engineering*, Vol. 38, No.2, pp. 391-402, 2010. (SCI/EI Journal, 2010 Impact factor=2.374, Ranking 19/69 (27.5%) ENGINEERING, BIOMEDICAL) (NSC96-2628-E-006-252-MY3)
16. **Yang, A. S.***, “Design Analysis of a Piezoelectrically Driven Synthetic Jet Actuator,” *Smart Materials and Structures*, Vol. 18, No.12, 2009, 125004 (12pp). (SCI/EI Journal, 2010 Impact factor=2.094, Ranking 11/61 (18.0%) INSTRUMENTS & INSTRUMENTATION) (NSC97-2221-E-027-023-MY2) (This paper has been selected in a collection of highlight articles published in 2009 in *Smart Materials and Structures* to showcase the exciting researches presented in the Institute of Physics Publishing across all areas of smart materials, structures and systems.)
17. **Yang, A. S.***, Ro, J. J. and Chang, W. H., “Experimental and Numerical Studies of Synthetic Jets Driven by a Dual-diaphragm Piezoelectric Actuator,” *Journal of Mechanical Engineering Science, Proc Instn Mech Engrs, Part C*, Vol. 223, pp. 1393-1400, 2009. (SCI/EI Journal, 2010 Impact factor=0.451, Ranking 79/122 (64.8%) ENGINEERING, MECHANICAL) (NSC97-2221-E-027-023-MY2)
18. Chan, T. H., Cheng, C. H., **Yang, A. S.*** and Tseng, L. Y., “A Novel Piezoelectric Valveless Micropump with an Integrated Diffuser/Nozzle Bulge Piece Design,” *Advanced Materials Research*, Vol. 74, pp. 227-230, 2009. (EI Journal)
19. **Yang, A. S.***, Ro, J. J. and Chang, W. H., “Performance Characterization of a Piezoelectric Micro

SJA,” *Advanced Materials Research*, Vol. 74, pp. 223-226, 2009. (EI Journal) (NSC97-2221-E-027-023-MY2)

20. Lin, J. C., **Yang, A. S.*** and Tseng L. Y., “Use of Micro Synthetic Jet Actuators for Boundary Layer Flow Control, *Advanced Materials Research*, Vol. 74, pp. 157-160, 2009. (EI Journal) (NSC97-2221-E-027-023-MY2)
21. Hsieh, C. Y. and **Yang, A. S.***, “Mixing Enhancement of a Passive Micromixer by Applying Boundary Protrusion Structures,” *Advanced Materials Research*, Vol. 74, pp. 77-80, 2009. (EI Journal)
22. **Yang, A. S.**, Wen, C. Y.* and Tseng, C. S., “Analysis of Flow Field around a Ribbed Helix Lip Seal,” *Tribology International*, Vol. 42, pp. 649-656, 2009. (SCI/EI Journal, 2010 Impact factor=1.557, Ranking 21/122 (17.2%) ENGINEERING, MECHANICAL)
23. **Yang, A. S.***, Ro, J. J., Yang, M. T. and Chang, W. H., “Investigation of Piezoelectrically Generated Synthetic Jet Flow,” *Journal of Visualization*, Vol. 12, No. 1, pp. 9-16, 2009. (SCI/EI Journal, Impact factor = 0.943) (NSC97-2221-E-027-023-MY2)
24. **Yang, A. S.**, Wen, C. Y.* and Tseng, L. Y., “In Vitro Characterization of Aortic Flow Using Numerical Simulation, PC-MRI and Particle Tracking Images,” *Journal of Mechanical Engineering Science*, Proc Instn Mech Engrs, Part C, Vol. 222, pp. 2455-2462, 2008. (SCI/EI Journal, 2010 Impact factor=0.451, Ranking 79/122 (64.8%) ENGINEERING, MECHANICAL) (NSC96-2628-E-006-252-MY3)
25. **Yang, A. S.***, “Investigation of Liquid-Gas Interfacial Shapes in Reduced Gravitational Environments,” *International Journal of Mechanical Sciences*, Vol. 50, pp. 1304-1315, 2008. (SCI /EI Journal, 2010 Impact factor=1.266, Ranking 29/122 (23.8%)ENGINEERING, MECHANICAL) (NSC94-2212-E-212-009)
26. **Yang, A. S.***, Hsieh, W. H. and Tseng, L. Y., “Three-Dimensional Unsteady Calculation for a Flow Cytometer,” *Journal of Mechanical Engineering Science*, Proc Instn Mech Engrs, Part C, Vol. 222, pp. 679-687, 2008. (SCI/EI Journal, 2010 Impact factor=0.451, Ranking 79/122 (64.8%) ENGINEERING, MECHANICAL) (NSC92-2218-E-194-021)
27. Cheng, C. H., **Yang, A. S.*** and Hsu, T. H., “Processing of PZT Actuator and Nickel Plate in a Multi-Droplets Microinjector,” *Journal of Materials Processing Technology*, Vol. 201, pp. 683-688, 2008. (SCI/EI Journal, 2010 Impact factor=1.567, Ranking 8/37 (21.6%) ENGINEERING, MANUFACTURING) (NSC94-2212-E-212-017)
28. **Yang, A. S.***, Cheng, C. H. and Hsu, F. S., “PZT Actuator Applied to a Femto-liter Droplet Ejector,” *Journal of Mechanical Science and Technology*, Vol. 21, pp. 1732-1738, 2007. (SCI/EI Journal, 2010 Impact factor=0.410, Ranking 86/122 (70.5%) ENGINEERING, MECHANICAL) (NSC94-2212-E-212-017)
29. **Yang, A. S.***, Yang, M. T. and Hong, M. C., “Numerical Study for the Impact of Liquid Droplets on Solid Surfaces,” *Journal of Mechanical Engineering Science*, Proc Instn Mech Engrs, Part C, Vol. 221, pp. 293-301, 2007. (SCI/EI Journal, 2010 Impact factor=0.451, Ranking 79/122 (64.8%) ENGINEERING, MECHANICAL) (NSC95-2221-E-212-037- MY2)
30. **Yang, A. S.*** and Hsieh, W. H., “Hydrodynamic Focusing Investigation in a Micro-flow Cytometer,” *Biomedical Microdevices*, Vol. 9, No.2, pp. 113-122, 2007. (SCI/EI Journal, 2010 Impact factor=3.386, Ranking 7/69 (10.1%) ENGINEERING, BIOMEDICAL) (NSC92-2218-E-194-021)

—Before 2007—

31. **Yang, A. S.*** and Tsai, W. M., “Ejection Process Simulation for a Piezoelectric Micro-Droplet Generator,” *Transactions of ASME, Journal of Fluids Engineering*, Vol. 128, pp. 1144-1152, 2006. (SCI/EI Journal, Impact factor=0.440, Ranking 82/122 (67.2%) ENGINEERING, MECHANICAL) (NSC92-2218-E-212-005) (This paper was ranked as the third place of top 10 most downloaded research articles during December, 2006.)
32. **Yang, A. S.***, “Plume Impingement Investigation Using Monte Carlo Computations,” *Journal of Aerospace Engineering*, Proc Instn Mech Engrs, Part G, Vol. 220, pp. 365-373, 2006. (SCI/EI Journal, Impact factor=0.451, Ranking 15/27 (55.6%) ENGINEERING, AEROSPACE) (NSC92-2212-E-212-018)
33. **Yang, A. S.*** and Wu, C. Y., “Computational Design Approach to Hydrodynamic Focusing in a Flow Cytometer,” *Lecture Notes in Bioinformatics(LNBI)*, Subseries of *Lecture Notes in Computer Sciences (LNCS)*, Vol. 4115, pp. 336-341, 2006. (SCI/EI Journal) (NSC92-2218-E-194-021)
34. **Yang, A. S.***, Cheng, C. H. and Lin, C. T., “Investigation of Droplet Ejection Characteristics for a Piezoelectric Inkjet Printhead,” *Journal of Mechanical Engineering Science*, Proc Instn Mech Engrs, Part C, Vol. 220, pp. 435-445, 2006. (SCI/EI Journal, Impact factor=0.451, Ranking 79/122 (64.8%) ENGINEERING, MECHANICAL) (NSC92-2218- E-212-005)
35. **Yang, A. S.***, Cheng, C. H., Tsai, W. M. and, Hsu, F. C. “Droplet Formation Studies for a Piezo-actuated Micro-injector,” *Material Science Forum*, Vols. 505-507, pp. 415-420, 2006. (EI Journal) (NSC92-2218-E-212-005)
36. **Yang, A. S.***, Yang, J. C., and Hong, M. C., “Droplet Ejection Study of a Picojet Printhead,” *Journal of Micromechanics and Microengineering*, Vol. 16, pp. 180-188, 2006. (SCI/EI Journal, Impact factor=2.276, Ranking 12/132 (9.1%) MECHANICS) (NSC92-2218-E-212-005) (This paper has been electronically downloaded over 500 times from January to August, 2006. Only 3% of articles were accessed more than 500 times in this year across all journals from Institute of Physics Publishing.)
37. **Yang, A. S.**, Huang, T. C., Hong, C. Y.* and Kao, Y. F., “Determination of Aerodynamic Characteristics for Two-dimensional Airfoil,” *Transactions of the Aeronautical and Astronautical Society of the Republic of China*, Vol.35, No.4, pp. 387-391, 2003. (EI Journal)
38. **Yang, A. S.***, and Kuo, T. C., “Plume Analysis of ROCSAT-1 Propulsion Subsystem,” *Transactions of the Aeronautical and Astronautical Society of the Republic of China*, Vol.35, No. 3, pp. 217-225, 2003. (EI Journal) (NSC92-2212-E-212-018)
39. Hsieh, W. H.*, Yen, Y. A. and **Yang, A. S.** “Use of Artificial Neural Networks in the Determination of Hydrogen/Oxygen Laminar Diffusion Flames at High Pressures,” *Journal of The Chinese Institute of Engineers*, Vol. 26, No. 4, pp. 409-422, 2003. (SCI/EI Journal)
40. **Yang, A. S.***, Kuo, T. C. and Ling, P. H., “Application of Neural Networks to Prediction of Phase Transport Characteristics in High-Pressure Two-Phase Turbulent Bubbly Flows,” *Nuclear Engineering and Design*, Vol. 223, pp. 295-313, 2003. (SCI/EI Journal) (NSC92-2623-7-212-001-NU)
41. **Yang, A. S.*** and Kuo, T. C., “Determination of Plume Impingement Disturbance Characteristics for ROCSAT-1 Satellite,” *Journal of Aerospace Engineering*, Proc Instn Mech Engrs, Part G, Vol. 216, pp. 237-247, 2002. (SCI/EI Journal) (NSC92-2212-E-212-018)

42. **Yang, A. S.*** and Kuo, T. C., “Design Trades of Rocsat-1 Reaction Control Subsystem,” *Transactions of the Aeronautical and Astronautical Society of the Republic of China*, Vol.34, No.3, pp. 257-266, 2002. (EI Journal) (NSC91-2212-E-212-008)
43. **Yang, A. S.*** and Kuo, T. C., “Design Analysis of a Satellite Propulsion System,” *AIAA Journal of Propulsion and Power*, Vol.18, No.2, pp. 270-279, 2002. (SCI/EI Journal) (Citation number= 1) (NSC91-2212-E- 212-008)
44. **Yang, A. S.*** and Kuo, T. C., “Blowdown and Fluid Hammer Studies for a Satellite Reaction Control Subsystem,” *Journal of Aerospace Engineering, Proc Instn Mech Engrs, Part G*, Vol. 215, pp. 291-299, 2001. (SCI/EI Journal) (NSC90-2212-E-212-029)
45. Kuo, T. C., **Yang, A. S.*** and Chieng, C. C., “Bubble Size and System Pressure Effects on Phase Distribution for Two Phase Turbulent Bubbly Flows,” *Journal of Mechanical Engineering Science, Proc Instn Mech Engrs, Part C*, Vol. 215, pp. 121-132, 2001. (SCI/EI Journal)
46. Kuo, T. C., **Yang, A. S.**, Pan, C. and Chieng, C. C.*, “Effects of Two Phase Turbulent Structure Interactions on Phase Distribution in Bubbly Pipe Flows,” *Journal of Japanese Society of Mechanical Engineering*, Vol. 42, No. 3, pp. 419-428, 1999. (SCI/EI Journal)
47. Kuo, T. C., **Yang, A. S.**, Pan, C. and Chieng, C. C.*, “Eulerian-Lagrangian Computations on Phase Distribution of Two Phase Bubbly Flows,” *Int. J. for Numerical Methods in Fluids*, Vol. 24, No. 1, pp. 579-593, 1997. (SCI/EI Journal)
48. **Yang, A. S.***, Hsieh, W. H. and Kuo, K. K., “Theoretical Study of Supersonic Flow Separation over a Rearward Facing Step,” *AIAA Journal of Propulsion and Power*, Vol. 13, No.2, pp. 324-326, 1997. (SCI/EI Journal)
49. Hsieh, W. H.* and **Yang, A. S.**, “Combustion Processes of Hydrogen/Oxygen Diffusion Flames Under High-Pressure Conditions,” *Journal of Chinese Society of Mechanical Engineering*, Vol. 17, No. 6, pp. 525-536, 1996. (SCI/EI Journal)
50. **Yang, A. S.***, Kuo, K. K. and Hsieh, W. H., “Combustion of LOX with Hydrogen under High Pressures,” *AIAA Journal of Propulsion and Power*, Vol. 12, No. 5, pp. 1001-1004, 1996. (SCI/EI Journal)
51. **Yang, A. S.** and Chieng, C. C.*, “Turbulent Heat and Momentum Transports in an Infinite Rod Array,” *Transactions of ASME, Journal of Heat Transfer*, Vol. 109, pp. 599-605, 1987. (SCI/EI Journal)

B. 專書及專書論文

1. **Yang, A. S.**, Kuo, K. K., and Hsieh, W. H., “Supercritical Evaporation and Combustion of LOX in an Axisymmetric Configuration,” *Recent Advances in Spray Combustion: Spray Atomization and Drop Burning Phenomena*, Volume 166, AIAA Progress in Astronautics and Aeronautics, American Institute of Aeronautics and Astronautics, Inc., Reston, Virginia, pp. 439-480, 1996.
2. **Yang, A. S.**, Huang, I. T., Hsieh, W. H., and Kuo, K. K., “Burning-Rate Characteristics of Boron/[BAMO/NMMO] Fuel-Rich Solid Propellant under Broad Range of Pressure and Temperature,” *The 2nd International Symposium on Special Topic in Chemicals Propulsion: Combustion of Boron-based Solid Propellants and Solid Fuels*, Hemisphere Publishing Corp., New York, pp. 412-426, 1992.

C. 研討會論文:

1. Liao, S. K., Wong, M. H., Tseng, L. Y., Hsien, Y. F., Wu, J. H., **Yang, A. S.***, Chen, P. H., "Application of CFD Analysis in Designing a Novel Vortex Mixer," The 18th National Computational Fluid Dynamics Conference, Paper No. CFD17-001, Yilan, Taiwan, 2011.
2. Chen, C. T.*, Cheng, C. H., and **Yang, A. S.**, "Trajectory Planning in SMA-actuated Parallel Manipulators," 3rd International Conference on Ferromagnetic Shape Memory Alloys (ICFSMA'11), Paper No. 11.22, Dresden, Germany, 2011.
3. Cheng, C. H., **Yang, A. S.***, and Chen, C. T., "Ferroelectric PZT Actuator Applied to Micropump with Check Valve," 3rd International Conference on Ferromagnetic Shape Memory Alloys (ICFSMA'11), Paper No. 11.25, Dresden, Germany, 2011.
4. Cheng, C. H.*, **Yang, A. S.**, and Chen, C. T., "Design and Fabrication of a Novel SMA-Actuated Microvalve," 3rd International Conference on Ferromagnetic Shape Memory Alloys (ICFSMA'11), Paper No.11.24, Dresden, Germany, 2011.
5. **Yang, A. S.**, Lee C. Y.*, Tseng, L. Y., and Liao, S. K., "Development of a Novel SMA-Tuned Micromixer," 3rd International Conference on Ferromagnetic Shape Memory Alloys (ICFSMA'11), Paper No. 11.23, Dresden, Germany, 2011.
6. Lee, D. S., **Yang, A. S.***, Chen, P. H., Liu, C. L., Lin, C. P. and Tseng, L. Y., "Effective Placement of RFID Sensors in a Meeting Room," The 27th Conference on Mechanical Engineering, CSME, Paper No. AA15-003, Taipei, Taiwan, 2010. (中國機械工程學會CSME第27屆全國學術研討會虎門科技ANSYS論文獎優選)
7. **Yang, A. S.**, Chen, Y. S., Tseng, L. Y., Lu, C. W. and Cai, Z. Y., "Design Optimization of Piezoelectric Micro-Synthetic Jet Actuator," 2010 AASRC Aerospace Joint Conference, Paper No.B4-2, Tao-Yuan, Taiwan, 2010.
8. Wang, W. C.*, Yang, C. H. and **Yang, A. S.**, "Acoustic Streaming Induced by Anti-symmetrical Flexural Modes near a Wedge Tip," 2010 IEEE Ultrasonics Symposium, Paper No. 11C-4, San Diego, California, USA 2010.
9. Shih, Y. C., **Yang, A. S.**, Lu, C. W. and Chen, C. W., "Automated Control Solution for Contaminant Dispersal in a Cleanroom," 8th IEEE International Conference on Industrial Informatics, Paper No. INDIN2010_ID-001961, Osaka, Japan, 2010.
10. Lin, C. J., Cheng, C. H. and **Yang, A. S.**, "Hybrid motion planning of a planar robot for a tracking problem with singularity," 8th IEEE International Conference on Industrial Informatics, Paper No. INDIN2010_ID-002208, Osaka, Japan, 2010.
11. Jiang, J. J., Wen, C. Y., **Yang, A. S.**, and Tseng, L. Y., "Analysis of Blood Flow Patterns in a Thoracic Aorta Model with Flow-stress Coupling Calculations," ISFV14-14th International Symposium on Flow Visualization, Paper No. 30, Daegu, Korea, 2010.
12. Tsai, W. L., Wen, C. Y., **Yang, A. S.**, and Tseng, L. Y., "Study of Pumping Flow Pattern with Fluid-Structure Coupling Analysis for a Ribbed Helix Lip Seal," ISFV14-14th International Symposium on Flow Visualization, Paper No. 43, Daegu, Korea, 2010.
13. **Yang, A. S.**, Tseng, L. Y., and Lin, J. C. "Flow Pattern of a Synthetic Jet in a Turbulent Boundary Layer Crossflow," ISFV14-14th International Symposium on Flow Visualization, Paper No. 126,

Daegu, Korea, 2010.

14. **Yang, A. S.**, Chen, Y. S., Tseng, L. Y., Lu, C. W. and Cai, Z. Y., “Design Studies of Piezoelectric Micro-Synthetic Jet Actuator (SJA) and its Application to Active Flow Control,” 2009 AASRC Aerospace Joint Conference, Paper No.A1-4, Taipei, Taiwan, 2009.
15. Chan, T. H., Cheng, C. H., **Yang, A. S.** and Tseng, L. Y., “A Novel Piezoelectric Valveless Micropump with an Integrated Diffuser/Nozzle Bulge Piece Design,” ICMAT-International Conference on Materials for Advanced Technologies, Symposium L, NEMS/MEMS Technology and Devices, Paper No. A186-544, Singapore, 2009.
16. **Yang, A. S.**, Ro, J. J. and Chang, W. H., “Performance Characterization of a Piezoelectric Micro SJA,” ICMAT- International Conference on Materials for Advanced Technologies, Symposium L, NEMS/MEMS Technology and Devices, Paper No. A185-382, Singapore, 2009.
17. Lin, J. C., **Yang, A. S.** and Tseng, L. Y., “Use of Micro Synthetic Jet Actuators for Boundary Layer Flow Control, ICMAT- International Conference on Materials for Advanced Technologies, Symposium L, NEMS/MEMS Technology and Devices, Paper No. A186-475, Singapore, 2009.
18. Hsieh, C. Y. and **Yang, A. S.**, “Mixing Enhancement of a Passive Micromixer by Applying Boundary Protrusion Structures,” ICMAT- International Conference on Materials for Advanced Technologies, Symposium L, NEMS/MEMS Technology and Devices, Paper No. A185-384, Singapore, 2009.
19. **Yang, A. S.**, Tseng, L. Y., and Lin, C. C., “Attitude-Adjustment-Induced Sloshing Characteristics in a Satellite Propellant Tank,” 2008 AASRC Aerospace Joint Conference, Paper No.14-01, Taipei, Taiwan, 2008.
20. Chan, T. H., Cheng, C. H. and **Yang, A. S.**, “Study of a Piezoelectric Valveless Micropump,” The 25nd Conference on Mechanical Engineering, CSME, Paper No. 25-1041, Chang-Hua, Taiwan, 2008.
21. Wen, C. Y., **Yang, A. S.**, Tseng, L. Y., Jiang, J. J. and Chai, J. W., “Study of Pulsatile Flowfield in Thoracic Aorta Model,” 2008 International Symposium on Biomedical Engineering, Paper No. 181, Tao-Yuan, Taiwan, 2008.
22. **Yang, A. S.**, Ro, J. J., and Chang, W. H., “Experimental and Numerical Studies of Synthetic Jets Driven by a Dual-diaphragm Piezoelectric Actuator,” ISFV13-13th International Symposium on Flow Visualization, Paper No. 71, Nice, France, 2008.
23. Tseng, L. Y., **Yang, A. S.**, and Wen, C. Y., “Investigation of Pulsatile Blood Flowfield in Healthy Thoracic Aorta Model,” ISFV13-13th International Symposium on Flow Visualization, Paper No. 72, Nice, France, 2008.
24. **Yang, A. S.**, Chang, S. C., Jan, C. H., Chang, W. H., Lin, Y. H., and Ho, M. L., “Study of Ejection Flow Characteristics of a Discharge Pump Injector,” 2007 AASRC Aerospace Joint Conference, Paper No. A2-09, Pingtung, Taiwan, 2007.
25. Chang, S. C., **Yang, A. S.**, Ho, M. L., Jan, C. H., and Lin, Y. H., “Development of Test Platform for a Novel Motorcycle Fuel Injector,” The 12th National Conference on Vehicle Engineering, Paper No. VE-16, Pingtung, Taiwan, 2007. (This paper was awarded as excellent research articles in the Conference.)
26. **Yang, A. S.**, Tseng, L. Y., and Chang, W. H., “Study of Slosh Phenomenon in Satellite Propellant Tank,” 2007 AASRC Aerospace Joint Conference, Paper No. A25-08, Pingtung, Taiwan, 2007.

27. Yang, M. T., **Yang, A. S.** and Ro, J. J., "Study of Piezoelectric-Actuated Synthetic Jet Flow," The 9th Asian Symposium on Visualization, Paper No. ASV0052-001, Hong Kong, China, 2007.
28. Chang, W. H., **Yang, A. S.** and Yang, M. T., "Study of Interfacial Phenomenon in Low-gravity Environments," The 9th Asian Symposium on Visualization, Paper No. ASV0053-001, Hong Kong, China, 2007.
29. Tseng, L. S., **Yang, A. S.**, Wen, C. Y. and Chai, J. W., "Characterization of In Vitro Aortic Flows," The 9th Asian Symposium on Visualization, Paper No. ASV0054-001, Hong Kong, China, 2007.
30. **Yang, A. S.**, Yang, M. T. and Tseng, L. Y., "Study of Liquid-Gas Interfacial Behavior in Reduced Gravitational Environments," 2006 CSCA/AASRC/CIROC Aerospace Joint Conference, Paper No. 02_07, Chung-Li, Taiwan, 2006.
31. Tseng, L. Y., Chou, T. Y., **Yang, A. S.**, Wen, C. Y., and Chai, J. W., "Characterization of In Vitro Aortic Flow," The 30th National Conference on Theoretical and Applied Mechanics, Paper No. CTAM-30-527, Changhwa, Taiwan, 2006.
32. Yang, M. T. and **Yang, A. S.**, "Numerical Study for the Impact of Liquid Droplets on Solid Surfaces," ESI CFD-Taiwan-User-Conference, Paper No. 7, Taipei, Taiwan, 2006.
33. Tseng, L. Y. and **Yang, A. S.**, "Determination of Flow Characteristics in Vitro Aortic Arch," ESI CFD-Taiwan-User-Conference, Paper No. 5, Taipei, Taiwan, 2006.
34. **Yang, A. S.**, Chen, C. F., and Yang, M. T., "Study of Interfacial Phenomenon for a Satellite Propellant Tank," 2005 CSCA/AASRC/CIROC Aerospace Joint Conference, Paper No. T-04, Kaohsiung, Taiwan, 2005.
35. **Yang, A. S.**, Cheng, C. H., Tsai, W. M. and, Hsu, F. C., "Droplet Formation Studies for a Piezo-actuated Micro-injector," Application of MEMS Systems, Proceedings of ICAM2005, Paper No. F010, Taipei, Taiwan, 2005.
36. Wen, C. Y., **Yang, A. S.**, and Tseng, C. S., "Design Analysis of a Rubber Lip Type Rotary Shaft Seal," The 22nd Conference on Mechanical Engineering, CSME, Paper No. A2-011, Chung-Li, Taiwan, 2005.
37. **Yang, A. S.**, Tsai, W. M. and, Yang, M. T. "Numerical Study of Droplet Ejection Behavior for a Squeeze Type Piezoelectric Printhead," ESI CFD-Taiwan-User-Conference, Paper No. 8, Taipei, Taiwan, 2005.
38. Hong, M. C. and **Yang, A. S.**, "Ink Ejection Performance Analysis for a Picojet Printhead," The 15th National Combustion Conference, Chia-Yi, Taiwan, 2005.
39. **Yang, A. S.** and Cheng, C. H., "Characterization of Droplet Ejection Process for a Piezoelectric Inkjet Printhead," Micro- and Nanotechnology: Materials, Processes, Packaging, and Systems II, Proceedings of SPIE, Paper No. 5650-42, pp. 244-255, Sydney, Australia, 2004.
40. **Yang, A. S.**, Chen, C. F., Kuo, T. C., and Hu, L. H., "Interfacial Phenomenon Study in Micro-Gravity Environments," 2004 CSCA/AASRC/CIROC Aerospace Joint Conference, Paper No.14-2, Tainan, Taiwan, 2004.
41. Tsai, W. M. and **Yang, A. S.**, "Numerical Study of Droplet Ejection Behavior for a Squeeze Type Piezoelectric Printhead," The 28th Conference on Theoretical and Applied Mechanics, Paper No. 10424, Taipei, Taiwan, 2004.

42. Tseng, C. S., Wen, C. Y. and **Yang, A. S.**, "Pumping Behavior Study on Rubber Lip Type Rotary Shaft Seal," The 28th Conference on Theoretical and Applied Mechanics, Paper No. 10416, Taipei, Taiwan, 2004.
43. Yang, S. W., Shu, F. Y., Yang, J. C., Chen, J. R., and **Yang, A. S.**, "Design and Fabrication of Piezoelectric Micro-ejection Device," The 21st Conference on Mechanical Engineering, CSME, Paper No. E0100963, Kaohsiung, Taiwan, 2004.
44. Lin, C. T. and **Yang, A. S.**, "Design Studies for a Piezoelectrically Driven Micro-Drop Ejector," The 11th National Computational Fluid Dynamics Conference, Paper No. CFD11-1905, Tai-tung, Taiwan, 2004.
45. Wu, C. Y. and **Yang, A. S.**, "Numerical Analysis for Hydrodynamic Focusing Flows Inside a Cytometer," The 11th National Computational Fluid Dynamics Conference, Paper No. CFD11-1918, Tai-tung, Taiwan, 2004.
46. **Yang, A. S.**, Kuo, T. C., and Hu, L. H., "The Studies of Impingement Disturbance for Satellite Thruster Plumes," 2003 CSCA/AASRC/CIROC Aerospace Joint Conference, Paper No.C4-06, Tainan, Taiwan, 2003.
47. Kuo, T. C., **Yang, A. S.**, and Hu, L. H., "Assessment of Technology Capabilities for Indigenous Satellite Hydrazine Propulsion System (ISHPS)," 2003 CSCA/AASRC/CIROC Aerospace Joint Conference, Paper No.C4-03, Tainan, Taiwan, 2003.
48. Kuo, T. C., Hu, L. H. and **Yang, A. S.**, "Study of Anomaly of ROCSAT-1 Propulsion Subsystem in Sun Mode," 2003 CSCA/AASRC/CIROC Aerospace Joint Conference, Paper No.C4-01, Tainan, Taiwan, 2003.
49. Lin, Chien-Tsung and **Yang, A. S.**, "Characterization of Droplet Ejection Process for a Piezoelectric Inkjet Printhead," The 20th Conference on Mechanical Engineering, CSME, Paper No. E01-25, Taipei, Taiwan, 2003.
50. Wu, Chun-Yao and **Yang, A. S.**, "Characterization of Hydrodynamic Focusing Behavior in a Flow Cytometer," The 20th Conference on Mechanical Engineering, CSME, Paper No. E07-10, Taipei, Taiwan, 2003.
51. Ling, P. H., Huang, T. C., and **Yang, A. S.**, "Application of Neural Networks to Prediction of Phase Transport Characteristics in High-Pressure Two-Phase Turbulent Bubbly Flows," The 19th Conference on Mechanical Engineering, CSME, Paper No. A2-001, Hu Wei, Taiwan, 2002.
52. Huang, T. C., Ling, P. H, **Yang, A. S.**, and Hong, C. Y., "Determination of Aerodynamic Characteristics for a Two-dimensional Airfoil," The 19th Conference on Mechanical Engineering, CSME, Paper No. A5-003, Hu Wei, Taiwan, 2002.
53. Hsieh, W. H., Lin, C. Y. and **Yang, A. S.**, "Simulation and Measurements of Blowdown Behavior of ROCSAT-1 Mono-Propellant Feed System," 2002 ROCSAT-1 Research Presentation Conference, May 23, National Space Program Office, Hsin Chu, Taiwan, 2002.
54. Wu, J. H., **Yang, A. S.**, Huang, S. C., Lin, H. J., Huang, C. C., and Kuo, T. C, "Design and Application of Microgravity Falling Test Platform," 2002 CSCA/AASRC/ CIROC Aerospace Joint Conference, Paper No. TF-01, Kaohsiung, Taiwan, 2002.
55. Kuo, T. C., Hu, L. H. and **Yang, A. S.**, "Flow Analysis for ROCSAT-2 Reaction Control Subsystem," 2002 CSCA/AASRC/CIROC Aerospace Joint Conference, Paper No.CI-4:09, Kaohsiung, Taiwan, 2002

56. **Yang, A. S.** and Ling, P. H., "Real-Time Determination of Phase Transport Characteristics in Bubbly Pipe Flows with Artificial Networks," Proceeding of 25th (ROC) National Conference on Applied and Theoretical Mechanics, pp. 555~564, 2001.
57. **Yang, A. S.** and Kuo, T. C., "Numerical Simulation for Satellite Hydrazine Propulsion System" The 37th AIAA/ASME/SAE/ASEE Joint Propulsion Conference, AIAA Paper No. 2001-3829, Salt Lake City, Utah, USA, 2001.
58. Kuo, T. C and **Yang, A. S.**, "Plume Analysis for ROCSAT-1 Reaction Control Subsystem," Proceeding of 4th Pacific International Conference on Aerospace Science and Technology (PICAST-4), Kaohsiung, Taiwan, pp. 647-654, 2001.
59. **Yang, A. S.** and Kuo, T. C., "Design Analysis of ROCSAT-1 Reaction Control Subsystem," Proceeding of 4th Pacific International Conference on Aerospace Science and Technology (PICAST-4), Kaohsiung, Taiwan, pp. 639-646, 2001.
60. Kuo, T. C. and **Yang, A. S.**, "Design Trade Study for ROCSAT-1 Reaction Control Subsystem," 2001 CSCA/AASRC/CIROC Aerospace Joint Conference, Paper No. CI-1:02, Taoyuan, Taiwan, 2001.
61. Kuo, T. C. and **Yang, A. S.**, "Technical Analyses for ROCSAT-2 Propulsion Subsystem," 1999 AASRC/CIROC/CSCA Aerospace Joint Conference, Paper No. CI-99-JI-05, Taoyuan, Taiwan, 1999.
62. Hsieh, W. H., Yen, Y. A., and **Yang, A. S.**, "Application of Artificial Neural Networks to Prediction of Axisymmetric Hydrogen/Oxygen Diffusion Flames at High Pressures," The Second Asia-Pacific Conference on Combustion (ASPACC-2), Tainan, Taiwan, 1999.
63. Kuo, T. C., **Yang, A. S.**, Pan, C., and Chieng, C. C., "Bubble Size and System Pressure Effects on Phase Distribution for Two Phase Turbulent Bubbly Flows," The 7th International Symposium on Flow Modeling and Turbulence Measurements (ISFMTM-7), Tainan, Taiwan, 1998.
64. Kuo, T. C., **Yang, A. S.**, and Chieng, C. C., "Numerical Formulation on Two Phase Turbulence Using Eulerian-Lagrangian Approach," The Second International Symposium on Turbulence, Heat and Mass Transfer (ISTHMT-2), Delft University Press, Netherlands, pp. 817-822, 1997.
65. Kuo, T. C., **Yang, A. S.**, Pan, C., and Chieng, C. C., "Prediction of the Entrance Region Effect on Turbulent Bubbly Flow in Pipe," The Eighth International Topical Meeting on Nuclear Reactor Thermal-Hydraulics (NURETH-8), Kyoto, Japan, 1997.
66. Hsieh, W. H., Yin, C., and **Yang, A. S.**, "Experimental studies on Blowdown and Water- hammer Behavior of Monopropellant Feed Systems for Satellite Attitude and Reaction Control," The 33rd AIAA Joint Propulsion Conference, Seattle, AIAA Paper No. 97-3224, WA, USA, 1997.
67. Hsieh, W. H. and **Yang, A. S.**, "Combustion Processes of Hydrogen/Oxygen Diffusion Flames Under High-Pressure Conditions," The 33rd AIAA Aerospace Science Meeting, AIAA Paper No. 95-0131, Reno, NV, USA, 1995.
68. **Yang, A. S.**, Kuo, K. K., and Hsieh, W. H., "Supercritical and Subcritical Combustion of LOX with Hydrogen in an Axisymmetric Laminar Diffusion Flame," Paper Presented at the Twenty-Fifth Symposium (International) on Combustion, University of California, Irvine, CA, USA, 1994.
69. **Yang, A. S.**, Hsieh, W. H., and Kuo, K. K., "Combustion of LOX Under Supercritical and Subcritical Conditions," Propulsion Engineering Research Center: Fifth Annular Symposium, The Pennsylvania State University, University Park, PA, USA, pp. 33-38, 1993.
70. **Yang, A. S.**, Hsieh, W. H., Kuo, K. K., and Brown, J. J., "Evaporation of LOX Under

Supercritical and Subcritical Conditions,” The 29th AIAA Joint Propulsion Conference, AIAA Paper No. 93-2188, Monterey, CA, USA, 1993.

71. **Yang, A. S.**, Brown, J. J., Hsieh, W. H., and Kuo, K. K., “Evaporation and Combustion of LOX Under Supercritical and Subcritical Conditions,” Propulsion Engineering Research Center: Fourth Annular Symposium, NASA Marshall Space Flight Center, Huntsville, AL, USA, pp. 69-74, 1992.
72. **Yang, A. S.**, Hsieh, W. H., and Kuo, K. K. “Numerical Study of Supersonic Flow Separation over a Rearward Facing Step Using a LU-SSOR Scheme,” The 27th AIAA Joint Propulsion Conference, AIAA Paper No. 91-2161, Sacramento, CA, USA, 1992.
73. Hsieh, W. H., **Yang, A. S.**, Yang V., and Kuo, K. K., “Measurement of Flowfield in a Simulated Solid-Propellant Ducted Rocket Combustor Using Laser Doppler Velocimetry,” The 25th AIAA Joint Propulsion Conference, AIAA Paper No. 89-2789, Monterey, CA, USA, 1989.

D. 專利:

	專利核發國家	專利型態	專利號碼	專利名稱	專利發明人	專利權人	專利權期間
1	中華民國	發明專利	I275723	密封元件	溫志湧、楊安石、李彥霆、蕭邦佶、曾俊翔	茂順密封元件科技股份有限公司	自2007年3月11日至2025年12月28日
2	中華民國	新型專利	M340377	密封元件	溫志湧、楊安石、曾豐育、蕭邦佶、翁銘振、柯晟斌	茂順密封元件科技股份有限公司	自2008年9月11日至2018年3月3日
3	中華民國	發明專利	I313634	流體噴霧致動結構	鄭江河、楊安石、張英論、余榮候、陳世昌	研能科技股份有限公司	自2009年8月21日至2027年5月21日
4	中華民國	發明專利	I328522	微致動流體供應器	鄭江河、楊安石、張英論、余榮候、陳世昌	研能科技股份有限公司	自2010年8月11日至2027年5月21日
5	中華人民共和國	發明專利	746986	微致動流體供應器	鄭江河、楊安石、張英論、余榮候、陳世昌	研能科技股份有限公司	自2007年5月17日至2027年5月17日
6	中華人民共和國	發明專利	763058	流體噴霧致動結構	鄭江河、楊安石、張英論、余榮候、陳世昌	研能科技股份有限公司	自2007年5月17日至2027年5月17日

E. 技術報告及其他:

1. 楊安石, “負壓驅動微型混合之研發,” 國科會, NSC99-2221-E-027-035期末結案報告, July 2011
2. 楊安石, “微型壓電合成噴流致動器設計與其應用於主動式氣流控制研析,” 國科會, NSC97-2221-E-027-023-MY2期末結案報告, July 2010

3. 楊安石、溫志湧、鄭江河，“整合微型幫浦和微型燃料電池以應用於推進次系統電源供應之技術發展,”國研院國家太空中心，98-NSPO(A)-GE-FAA3-01期末進度報告，May 2010
4. 楊安石、溫志湧、鄭江河，“整合微型幫浦和微型燃料電池以應用於推進次系統電源供應之技術發展,”國研院國家太空中心，98-NSPO(A)-GE-FAA3-01期中進度報告，September 2009
5. 楊安石，“微型壓電合成噴流致動器設計與其應用於主動式氣流控制研析,”國科會，NSC97-2221-E-027-023-MY2期中進度報告，May 2009
6. 楊安石，“衛星推進次系統濺動分析技術建立,”國科會，NSC94-2221-E-212-020-MY2結案報告，September 2008
7. 楊安石，“衛星推進次系統濺動分析技術建立,”國科會，NSC94-2221-E-212-020-MY2期中進度報告，May 2007
8. 楊安石，“重力降低環境條件下液氣界面運動行為探討(II),”國科會，NSC94-2212-E-212-009結案報告，August 2006
9. 楊安石、吳佩學，“25kW 小型風力發電示範系統之建立-風力渦輪機流場分析,”原委會，NL940245委託研究計畫研究報告，November 2005
10. 楊安石，“重力降低環境條件下液氣界面運動行為探討(I),”國科會，NSC93-2212-E-212-010結案報告，September 2005
11. 楊安石，“衛星推進次系統設計分析關鍵技術之建立—噴流衝擊分析技術,”國科會，NSC 92-2212-E-212-018結案報告，August 2004
12. 楊安石，“類神經網路應用於高壓雙相氣泡發展紊流之流場相分佈機制即時決定,”國科會，NSC 92-2623-7-212-001-NU結案報告，February 2004
13. 楊安石，“衛星推進次系統設計分析關鍵技術之建立,”國科會，NSC91-2212-E-212-008結案報告，August 2003
14. 楊安石，“推進次系統表面張力型燃料槽噴濺現象分析研究(II),”國科會太空計畫室，NSC91-NSPO(A)-PC-FD11-02結案報告，August 2003
15. 楊安石、謝文馨、袁曉峰，“單基推進系統自主發展技術資料整合,”國科會太空計畫室，NSC91-NSPO(A)-PC-FD11-01結案報告，May 2003
16. 楊安石，“推進次系統表面張力型燃料槽噴濺現象分析研究(I),”國科會太空計畫室，NSC90-NSPO(A)-PC-FD11-02結案報告，August 2002
17. 楊安石，“旋翼機動態負載分析技術開發—旋翼流場CFD分析,”中科院承接院外委託計畫勞務分包結案報告，December 2001
18. 楊安石，“中華二號衛星推進次系統之沖壓特性與液錘現象研究,”國科會，NSC90-2212-E-212-029結案報告，August 2001
19. Yang, A. S. and Kuo, T. C., “Preliminary Plume Analysis for Reaction Control Subsystem Using the Collision-less DSMC Method,” Mechanical Engineering Section, National Space Program Office, Report No. RS2-ME-2000-003, 2000.
20. Kuo, T. C. and Yang, A. S., “Performance Analyses for ROCSAT-2 Propulsion Subsystem,” Mechanical Engineering Section, National Space Program Office, Report No RS2-.ME-99- 044, 1999.
21. Kuo, T. C. and Yang, A. S., “ROCSAT-1 Performance/Status Report-RCS,” Mechanical Engineering Section, National Space Program Office, Report No. RS1-ME-99-003, 1999.
22. Kuo, T. C. and Yang, A. S., “RCS In-Orbit Performance Checkout,” Mechanical Engineering

Section, National Space Program Office, Report No. RS1-ME-99-002, 1999.

23. Yang, A. S. and Kuo, T. C., "Issues Concerned on ROCSAT-2 Propulsion Subsystem Design," Mechanical Engineering Section, National Space Program Office, Report No. RS2-ME- 99-020, 1999.
24. Yang, A. S. and Kuo, T. C., "Reviewed Comments on DSS Propulsion Subsystem Specification," Mechanical Engineering Section, National Space Program Office, Report No. RS2-ME-99-017, 1999.
25. Yang, A. S. and Kuo, T. C., "ROCSAT-3 Propulsion Subsystem Status Report," Mechanical Engineering Section, National Space Program Office, Report No. RS3-ME-99-001, 1999.
26. Kuo, T. C. and Yang, A. S., "Presentation Package of ROCSAT-2 Status Review Meeting on ADCS & RCS Subsystems," Mechanical Engineering Section, National Space Program Office, Report No. RS2-ME-99-009, 1999.
27. Yang, A. S. and Kuo, T. C. , "Leakage Rate Criteria for ROCSAT-2 Propulsion Subsystem," Mechanical Engineering Section, National Space Program Office, Report No. RS2-ME-99-008, 1999.
28. Yang, A.S. and Kuo, T.C., "Issues Concerned on the Insufficient Tank Capacity for ROCSAT-2," Mechanical Engineering Section, National Space Program Office, Report No. RS2-ME-99-003, 1999.
29. Kuo, T. C. and Yang, A. S., "Reviewed Comments on ROCSAT-2 Propulsion Subsystem Design," Spacecraft Bus Project, National Space Program Office, Report No. RS2-SC-99-109, 1999.
30. Yang, A. S. and Kuo, T. C., "ROCSAT-2 Propulsion Subsystem Design Review," Spacecraft Bus Project, National Space Program Office, Report No. RS2-SC-99-107, 1999.
31. Yang, A. S. "Critical Telemetries for RCS in Normal Operation," Spacecraft Bus Project, National Space Program Office, Report No. ROCSAT-1.SC88.006, 1999.
32. Kuo, T. C. and Yang, A. S., "Mass Estimation for GN2 Pressurant," Spacecraft Bus Project, National Space Program Office, Report No. ROCSAT-1.SC88.001, 1999.
33. Yang, A. S., "Incorrect Telemetry of Pressure Transducer," Spacecraft Bus Project, National Space Program Office, Report No. ROCSAT-1.SC87.096, 1998.
34. Yang, A. S., "Verification of Tank Pressure Range Transmitted via the Launch Vehicle Telemetry Data Link," Spacecraft Bus Project, National Space Program Office, Report No. ROCSAT-1. SC87.094, 1998.
35. Kuo, T. C. and Yang, A. S., "Trending Data of RCS," Spacecraft Bus Project, National Space Program Office, Report No. ROCSAT-1.SC87.047, 1998.
36. Yang, A. S. and Kuo, T. C., "Updated ROCSAT-3 Propulsion Subsystem Mass Calculation," Spacecraft Bus Project, National Space Program Office, Report No. ROCSAT-1. SC87.032, 1998.
37. Kuo, T.C. and Yang, A.S., "Revised Listing of the RCS Telemetry Checkout Display," Spacecraft Bus Project, National Space Program Office, Report No. ROCSAT-1.SC87.027, 1998.
38. Yang, A. S. and Kuo, T. C., "ROCSAT-3 Propulsion Subsystem Mass Calculation," Spacecraft Bus Project, National Space Program Office, Report No. ROCSAT-1.SC87.024, 1998.
39. Kuo, T. C. and Yang, A. S., "Listing of the RCS Telemetry Checkout Display," Spacecraft Bus Project, National Space Program Office, Report No. ROCSAT-1.SC87.020, 1998.
40. Yang, A. S. and Kuo, T. C., "Payload Process Requirement Document (PPRD): Fluid Services," Spacecraft Bus Project, National Space Program Office, Report No. ROCSAT-1.SC87.015, 1998.
41. Kuo, T. C. and Yang, A. S., "Payload Process Requirement Document (PPRD): Sec. 3.5 and 7.0,"

- Spacecraft Bus Project, National Space Program Office, Report No. ROCSAT-1.SC87.014, 1998.
42. Yang, A. S. and Kuo, T. C., "Characteristics for Four Communication Satellites," Spacecraft Bus Project, National Space Program Office, Report No. ROCSAT-1.SC86.249, 1997.
 43. Yang, A. S., "First Draft of ROCSAT-1 RCS In-Orbit Checkout Plan," Spacecraft Bus Project, National Space Program Office, Report No. ROCSAT-1.SC86.218, 1997.
 44. Yang, A. S. and Kuo, T. C., "Selection of Propellant Tank for ROCSAT-2 Propulsion System," Spacecraft Bus Project, National Space Program Office, Report No. ROCSAT-1.SC86.211, 1997.
 45. Yang, A. S. and Kuo, T. C., "Preliminary Study on Spacecraft Lewis Spinning," Spacecraft Bus Project, National Space Program Office, Report No. ROCSAT-1.SC86.210, 1997.
 46. Yang, A. S. and Kuo, T. C., "Fluid Analysis for Determining Flow Coefficient of Needle Valve to be Installed in RCS Pressurization System," Spacecraft Bus Project, National Space Program Office, Report No. ROCSAT-1.SC86.206, 1997.
 47. Kuo, T. C. and Yang, A. S., "Status Report for the DSMC Model Development," Spacecraft Bus Project, National Space Program Office, Report No. ROCSAT-1.SC86.190, 1997.
 48. Yang, A. S. and Kuo, T. C., "LLV1 Internal Payload Fairing Pressure Profile Calculation During the Phase of First Stage Acceleration," Spacecraft Bus Project, National Space Program Office, Report No. ROCSAT-1.SC86.189, 1997.
 49. Yang, A. S. "Progress Report of a Low-Thrust (≤ 5 lbf) Hydrazine Thruster Design," Spacecraft Bus Project, National Space Program Office, Report No. ROCSAT-1.SC86.182, 1997.
 50. Kuo, T. C. and Yang, A. S., "Reviews on TRW Response to NSPO Comments on DRL 44 Propulsion Verification Analysis Data Package," Spacecraft Bus Project, National Space Program Office, Report No. ROCSAT-1.SC86.174, 1997.
 51. Yang, A. S. and Kuo, T. C., "Calculations of Consumption of Compressed Dry Air and Nitrogen Bottles for Satellite Container Purge Flows," Spacecraft Bus Project, National Space Program Office, Report No. ROCSAT-1.SC86.172, 1997.
 52. Yang, A. S., "Error Analysis on Satellite System and Component Leak Tests," Spacecraft Bus Project, National Space Program Office, Report No. ROCSAT-1.SC86.134, 1997.
 53. Yang, A. S. and Kuo, T. C., "Review Comments on Satellite System and Component Leak Test Procedure," Spacecraft Bus Project, National Space Program Office, Report No. ROCSAT-1.SC86.129, 1997.
 54. Yang, A. S. and Kuo, T. C., "Review Comments on Propulsion Verification Analysis Data Package," Spacecraft Bus Project, National Space Program Office, Report No. ROCSAT-1.SC86.112, 1997.
 55. Yang, A. S., "Database for Small Satellites," Spacecraft Bus Project, National Space Program Office, Report No. ROCSAT-1.SC86.067, 1997.
 56. Yang, A. S., "Review on TRW Response to NSPO Comments on Propellant Tank EIDP," Spacecraft Bus Project, National Space Program Office, Report No. ROCSAT-1.SC86.002, 1997.
 57. Yang, A. S., "Review on TRW Response to NSPO Comments on Propulsion Subsystem (RCS) EIDP," Spacecraft Bus Project, National Space Program Office, Report No. ROCSAT-1.SC86.001, 1997.
 58. Yang, A. S., and Kuo, T. C., "Mighty Sat: Program Overview," Spacecraft Bus Project, National Space Program Office, Report No. ROCSAT-1.SC85.081, 1996.
 59. Yang, A. S., "Fundamentals of Turbulent Flames," Spacecraft Bus Project, National Space Program Office, Report No. ROCSAT-1.SC85.078, 1996.
 60. Yang, A. S. and Kuo, T. C., "The Development of Compressible Laminar Reacting Flow and

Incompressible Turbulent Flow Solvers,” Spacecraft Bus Project, National Space Program Office, Report No. ROCSAT-1.SC85.076, 1996.

61. Cheng, M. C., Yang, A. S., and Kang, C. S., “Resolution of ROCSAT-1 Spacecraft TBRs,” Spacecraft Bus Project, National Space Program Office, Report No. ROCSAT-1. SC85.026, 1996.
62. Yang, A. S., “Review Comments on Performance Characteristics Check of End Item Data Package (EIDP) of Propulsion Subsystem,” Spacecraft Bus Project, National Space Program Office, Report No. SC8509-PRO-016, 1996.
63. Yang, A. S., “Calculation of Acoustic Pressure Oscillation Frequency for LMLV Castor 120 Motor,” Spacecraft Bus Project, National Space Program Office, Report No. SC8508-PRO-013, 1996.
64. Yang, A. S., “Review Comments on Performance Characteristics Check of End Item Data Package (EIDP) of Propellant Tank,” Spacecraft Bus Project, National Space Program Office, Report No. SC8507-PRO-010, 1996.
65. Yang, A. S. and Chu, D., “Review of TRW Spacecraft Integration and Test Flow,” Spacecraft Bus Project, National Space Program Office, Report No. SC8504-ITG-002, 1996.
66. Yang, A. S., “Review of Function Test Results of RCS Components,” Spacecraft Bus Project, National Space Program Office, Report No. SC8503-PRO-005. 1996.
67. Yang, A. S., “RCS Steady-State Fluid Analysis,” Spacecraft Bus Project, National Space Program Office, Report No. SC8501-PRO-001, 1996.
68. Yang, A. S., “Internal Flowfield Simulation of Thrusters,” Spacecraft Bus Project, National Space Program Office, Report No. SC8412-PRO-016, 1995.
69. Yang, A. S., “RCS Pressure Drop Analysis,” Spacecraft Bus Project, National Space Program Office, Report No. SC8411-PRO-011, 1995.
70. Yang, A. S., “Preliminary RCS Failure Modes and Effects Analysis,” Spacecraft Bus Project, National Space Program Office, Report No. SC8409-PRO-008, 1995.
71. Yang, A. S., “Overview of the ROCSAT-1 Reaction Control Subsystem (RCS) Design,” Spacecraft Bus Project, National Space Program Office, Report No. SC8408-PRO-005, 1995.
72. Yang, A. S., “Programming of View-Factor Calculator,” Propulsion Group, National Space Program Office, Report No. ME8401-PRO-001, 1995.
73. Yang, A. S., “Combustor Conceptual Design for Bi-Propellant Lightsat-Based Thrusters,” Propulsion Group, National Space Program Office, Report No. ME8312-PRO-006, 1994.
74. Yang, A. S., “Determination of ROCSAT-1 Propellant Loading Performance,” Propulsion Group, National Space Program Office, Report No. ME8312-PRO-005, 1994.
75. Yang, A. S., “Investigation of Leakage Effect on the Pressurization Conditions for the ROCSAT-1 Reaction Control Subsystem,” Propulsion Group, National Space Program Office, Report No. ME8311-PRO-004, 1994.
76. Yang, A. S., “Evaluation of Four Proposals (Including TRW, SS/LORAL, IAI, and MATRA) for the ROCSAT-1 Propulsion System Design,” Propulsion Group, National Space Program Office, Report No. ME8310-PRO-003, 1994.
77. Yang, A. S., “Design Process of the Propulsion Subsystem for Low-Earth-Orbit (LEO) Satellites,” Propulsion Group, National Space Program Office, Report No. ME8309-PRO-002, 1994.
78. Yang, A. S., “Modeling of Hydrazine Thruster Exhaust Plumes,” Propulsion Group, National Space Program Office, Report No. ME8307-PRO-001, 1994.