*石心怡副教授

所有發表期刊論文

- 1. Liu, C. R. and **Shih, H. Y.**, "Model Analysis of Syngas Combustion and Emissions for a Micro Gas Turbine," Journal of Engineering for Gas Turbine and Power 137(6), 061507, 2015 (in Presss).
- 2. **Shih, H. Y.**, Liu, C. R., "A Computational Study on the Combustion of Hydrogen/Methane Blended Fuels for a Micro Gas Turbine," International Journal of Hydrogen Energy, 39: 15103-15115, 2014.
- 3. **Shih, H. Y.**, Hsu, J. R., Lin, Y. H., "Computed Flammability Limits of Opposed-jet H₂/CO Syngas Diffusion Flames," International Journal of Hydrogen Energy, 39: 3459-3468, 2014.
- Shih, H. Y. and Hsu, J. R., "Dilution Effects Analysis of Opposed-jet H₂/CO Syngas Diffusion Flames," Combustion Theory and Modelling, 17 (3): 543-562, 2013.
- 5. **Shih, H. Y.** and Hsu, J. R., "Computed NOx Emission Characteristics of Opposed-jet Syngas Diffusion Flames," Combustion and Flame, 159: 1851-1863, 2012.
- 6. **Shih, H. Y.** and Hsu, J. R. "Computed Extinction Limits and Flame Structures of Opposed-jet Syngas Diffusion Flames," Applied Mechanics and Materials v.110-116, p4899-4906, 2012.
- 7. Chang, Y. Z., Hung, K. T., **Shih, H. Y**., Tsai, Z. R. "Surrogate Neural Network and Multi-objective Direct Algorithm for the Optimization of a Swiss-roll Type Recuperator," International Journal of Innovative Computing Information and Control, v.8, n12, pp.8199-8241, 2012.
- 8. **Shih, H. Y.** and Hsu, J. R., "A Computational Study of Combustion and Extinction of Opposed-jet Syngas Diffusion Flames," International Journal of Hydrogen Energy, 36: 15868-15879, 2011.
- 9. **Shih, H. Y.**, Liu, C. R., "A Computational Study of hydrogen Substitution Effects on the Combustion performance for a Micro Gas Turbine," Proceedings of ASME Turbo Expo, v3, pp.713-721, 2011.

- 10. **Shih, H. Y.**, Liu, C. R., "Combustion Characteristics and Hydrogen Addition Effects on the Performance of a Can Combustor for a Micro Gas Turbine," Proceedings of ASME Turbo Expo, v5, pp.271-280, 2010.
- 11. **Shih, H. Y.** and Huang, Y. C., "Thermal Design and Model Analysis of the Swiss-roll Recuperator for an Innovative Micro Gas Turbine," Applied Thermal Engineering, 29: 1493-1499, 2009.
- 12. Shih, H. Y., "Computed Flammability Limits and Spreading Rates of Upward Flame Spread over a Thin Solid in Low-Speed Buoyant Flows," Combustion Science and Technology, 181: 379-395, 2009.
- 13. **Shih, H. Y.** and Liu, C. R., "Combustion Characteristics of a Can Combustor with a Rotating Casing for an Innovative Micro Gas Turbine," Journal of Engineering for Gas Turbines and Power, vol. 131, No.4, July, 2009.
- 14. **Shih, H. Y.,** "Flame Spread and Interactions in an Array of Thin Solids in Low-Speed Concurrent Flows," Combustion Theory and Modelling, vol. 13, No. 3: 443-459, 2009.
- 15. Shih, H. Y., "Computed Extinction Limits and Flame Structures of H2/O2 Counterflow Diffusion Flames with CO2 Dilution," International Journal of Hydrogen Energy, 34: 4005-4013, 2009.
- 16. Shih, H. Y. and Wu, H. C., "An Experimental Study of Upward Flame Spread and Interactions over Multiple Solid Fuels," Journal of Fire Sciences, 26: 435-453, 2008.
- 17. Chang, Y. Z., Hung, K. T., **Shih, H. Y.**, "Optimizing the Swiss-roll Recuperator of an Innovative Micro Gas Turbine by a Surrogate Neural Network and the Multi-Objective Direct Algorithm," Proceedings of the ASME Turbo Expo, v1, p713-721, 2008.
- 18. **Shih, H. Y.**, Liu, C. R., "Combustion Characteristics of a Can Combustor with a Rotating Casing for an Innovative Micro Gas Turbine," Proceedings of ASME Turbo Expo, v3, Part A, pp. 21-29, 2008.
- 19. **Shih, H. Y.**, Wang, D. and Kuo, C. R., "Feasibility Study of an Innovative Micro Gas Turbine with a Swiss-roll Recuperator," Proceedings of the ASME Turbo Expo, v5 Part A, p459-466, 2006.
- 20. Ferkul, P., Kleinhenz, J., **Shih, H. Y.** et. al., "Solid Fuel Combustion Experiments in Microgravity Using a Continuous Fuel Dispenser and

- Related Numerical Simulations," Microgravity Science and Technology XV/2 pp3-12, 2004.
- 21. Kumar, A., **Shih, H. Y.** and T'ien, J. S., "A Comparison of Extinction Limits and Spreading Rates in Opposed and Concurrent Spreading Flames over Thin Solids," Combustion and Flames, 132: 667-677, 2003.
- 22. **Shih, H. Y.** and T'ien, J. S., "A Three-Dimensional Model of Flame Spread over a Thin Solid in Low-Speed Concurrent Flow," Combustion Theory and Modelling, 7: 677-704, 2003.
- 23. Feier, I. I., **Shih, H. Y.**, Sacksteder, K. R., and T'ien, J. S. "Upward Flame Spread over Thin Solids in Partial Gravity," Proceedings of the Combustion Institute 29: 2569-2577, 2002.
- 24. **Shih, H. Y.** and T'ien, J. S., "Modeling Concurrent Flame Spread over a Thin Solid in a Low-Speed Flow Tunnel," Proceedings of the Combustion Institute 28: 2777-2784, 2000.
- 25. **Shih, H. Y.**, Bedir, H., T'ien, J. S., and Sung, C. J., "Computed Flammability Limits of Opposed-Jet H₂/O₂/CO₂ Diffusion Flames at Low Pressure," Journal of Propulsion and Power, vol. 15, No. 6, November-December, pp. 903-908, 1999.