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**PUBLICATIONS**

(3 book chapters, 66 International Journal articles, 14 Chinese articles, 88 conference proceedings, 6 PhD student dissertations, 12 Master student theses, 900 total citation, h-index: 17)

***Book Chapters***

1. G.-X. Wang and V. Prasad, 2000, "Rapid Solidification: Fundamentals and Modeling," *Annual Review in Heat Transfer*, C.L. Tien (Ed.), Vol. 11, pp. 207-305.
2. T. Kyu, H. Xu, T. Guo, and G.X. Wang, 2010, "Phase Field Modeling on Polymer Crystallization and Phase Separation in Crystalline Polymer Blends," in *Encyclopedia of Polymer Blends*, A. I. Isayev Eds., Wiley-VCH Verlag, Weinheim, Chapter 4, pp. 113-151.
3. D. Li, G.-X, Wang, and Y.L. He, 2011, "Thermal Modelling for Laser Treatment of Port Wine Stains," in *Developments in Heat Transfer*,

9. Zhou, Z.-F., Wu W.T., Chen B., Wang, G.-X., and Guo L.-J., 2012, "An experimental study on the spray and thermal characteristics of R134a two-phase flashing spray," *Int. J. Heat Mass Transfer*, Vol. 55, no. 15-16, pp. 4460-4468.
10. Zhou, Z.-F., Chen B., Guo L.-J., Wang Y.-S. and G.-X. Wang, 2012, "An Experimental Study on Pulsed Spray Cooling with Refrigerant R-404a in Laser Surgery," *Applied Thermal Engineering*, Vol. 39, pp. 29-36.
11. Ying, Z.-X., Ma, H.-Q., Liu, Y., Xiao, S.-X., Wang, Y.-X., Wang, G.-X., 2011, "A novel mutation of CYLD in a Chinese family with multiple familial trichoepithelioma," *J. European Academy Dermatology Venereology* (in Press).
12. Qin, Z., Zhe, J., Wang, G.-X., 2011, Effects of particle's off-

22. H. Li, E.A. Evans, and G.-X. Wang, 2005, "A three dimensional conjugate model with realistic boundary conditions for Flow and heat transfer in an industry scale hydrothermal autoclave," *Int. J. Heat Mass Transfer*, Vol. 48, pp. 5166-5178.
23. X.L. Huai, Z.W. Tang, G.-X. Wang and W.W. Wang, 2005, "Multi-phase flow and heat transfer of a micro-pump thermally driven by a multi-output pulse laser," *Chinese Physics Letter*, Vol. 22, No. 2, pp. 398-401.
24. W. Franco, J. Liu, G.-X. Wang, J. S. Nelson and G. Aguilar, 2005, "Radial Heat Transfer Dynamics during Cryogen Spray Cooling," *Physics Medicine Biology*, Vol. 50, pp. 387-397.
25. H. Li, E. A. Evans, and G. - X. Wang, 2005, "Single- and multi-hole baffles – a heat transfer and fluid flow control for hydrothermal growth," *J. Crystal Growth*, Vol. 275, pp. 561-571.

36. G. Aguilar, G.-X. Wang, and J.S. Nelson, 2003, "Dynamic Cooling Behavior during Cryogen Spray Cooling: Effects of Spurt Duration and Spray Distance," *Lasers in Surgery and Medicine*, Vol. 32, pp. 152-159, 2003.
37. G.-X. Wang, C. Yao, and B. T. F. Chung, 2003, "Thermal Analysis on Planar Interface Stability in Solidification of Semitransparent Materials," *AIAA J. Thermophysics Heat Transfer*, Vol. 17, No.2, pp. 193-198.
38. H.M. Li, A. Evans, and G.-X. Wang, 2003, "Flow of Solution in Hydrothermal Autoclaves with various Aspect Ratios," *J. Crystal Growth*, Vol. 256, pp. 146-155.
39. D. Lin, G.-X. Wang, T.S. Srivatsan, and M. Petraroli, 2003, "Influence of Titanium Dioxide Nanopowder Addition on Microstructura

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### Articles in Peer-Reviewed Conference Proceedings:

1. Li D., Chen B., Wu W.J., Wang G.X., He Y.L., Ying Z.X. Experimental study on the vascular thermal response to visible lasers. *15th International Heat Transfer Conference*, August 10-15, 2014, Kyoto, Japan.
2. Li D., Chen B., Wu W.J., Wang G.X., He Y.L., A new theoretical modeling of selectively photothermolysis to aid laser treatment of poor responding port wine stain blood vessels. *15th International Heat Transfer Conference*, August 10-15, 2014, Kyoto, Japan.
3. Zhang Y., Chen B., Li D., Wang G.X. A three dimensional geometric Monte-Carlo method for the light propagation in bio-tissue. *Third International Conference on Computational Methods for Thermal Problems*, June 2-4, 2014, Lake Bled, Slovenia.
4. Li D., Chen B., Wu W.J., Wang G.X., He Y.L. Theoretical investigation on thermal responses of blood vessels to 505nm and 1064nm laser. *Third International Conference on Computational Methods for Thermal Problems*, June 2-4, 2014, Lake Bled, Slovenia.
5. Li D., Chen B., Wang G.X. Mathematical modeling of cryogen spray cooling in cutaneous laser surgery using realistic boundary conditions. *International Heat Transfer Symposium*, 6-9, May, 2014, Beijing, China
6. Li D., Wang G.X., Chen B. He Y.L. Numerical modeling of tissue freeze during cryogen spray cooling with R134a, R407c and R404a. *2nd International Workshop on Heat Transfer Advances for Energy Conservation and Pollution Control*, October 18-21, 2013, Xi'an, China.
7. Zhou Z.-F, Wu W.T., G.-X. Wang, Gong Z., Chen B., Wang Y.S, Guo L.J., 2011, "Thermal Characteristics of Flashing Spray of Volatile R134a Cryogen," *Proceedings of IMECE 2011*, Denver, USA, IMECE2011-65033.
8. Zhou Z.-F, Wu W.T., Chen B., Guo L.J., G.-X. Wang, 2011, "Visualization and Characterization of the Flashing Spray of Cryogen R404a," *Proceedings of IMECE 2011*, Denver, USA, IMECE2011-65037.
9. Li Dong, Wang G-X, He Y-L, Wang Y-S, and Wang Y-X, 2011, "A Two-Temperature Model For Selective Photothermolysis In Laser Dermatology," *Proceedings of IMECE 2011*, Denver, USA, IMECE2011-65442.
10. L. Liu, Q.C. Bi, and G.-X. Wang, 2009, "Dynamics of evaporation and cooling of a water droplet during the earlier stage of depressurization," *Proceedings of IMECE2009 2009 ASME International Mechanical Engineering Congress and Exposition*, Nov. 13-19, 2009, Lake Buena Vista, Florida, IMECE2009-12154.
11. Z.-P. Qin, Y.-S. Wang, and G.-X. Wang, 2009, "Flow of electrolyte with a surface-charged particle in a nano-channel: quasi-steady modeling," *Proceedings of IMECE2009 2009 ASME International Mechanical Engineering Congress and Exposition*, Nov. 13-19, 2009, Lake Buena Vista, Florida, IMECE2009-12173.
12. A.P. Ramu and G.-X. Wang, 2009, "Numerical Simulation of flow and Wall Shear Stress Distribution in dorsal aneurysms of varying arterial curvature," *Proceedings of IMECE2009 2009 ASME International Mechanical Engineering Congress and Exposition*, Nov. 13-19, 2009, Lake Buena Vista, Florida.

13. Z.-P. Qin, Y.-S. Wang, and G.-X. Wang, 2009, Multi-physical modeling of electrolyte flow in a micro/nano-channel with a surface-charged particle, *6th International Symposium on Multiphase Flow, Heat Mass Transfer and Energy Conversion*, Xi'an, China, July 11-15, 2009.
14. A. P. Ramu and G.-X. Wang, 2009, "Numerical analysis of flow and shear stress distribution of saccular intracranial aneurysms arising at various angles to the parent artery," *Proceedings of the 20th National and 9th International ISHMT-ASME Heat and Mass Transfer Conference*, January 4-6, 2010, Mumbai, India, 10HMTC220.
15. Z. Zhou, H. Xin, B. Chen, G.-X. Wang, 2008, "Theoretical Evaporation Model of a Single Droplet in Laser Treatment of PWS in Conjunction with Cryogen Spray Cooling," *Proceedings of 2008 ASME Summer Heat Transfer Conference*, Aug. 10-14, 2008, Hyatt Regency Riverfront, Jacksonville, Florida, HT2008-56063.
16. Z. Zhou, H. Xin, B. Chen, and G.-X. Wang, 2008, "Single Droplet Evaporation Model in Laser Treatment of PWS in Conjunction with Cryogen Spray Cooling," *Proceedings of 2008 International Conference on Bio-Medical Engineering and Informatics*, Sanya, Hainan, China, May 28-30, 2008, Vol. 1, pp. 551-556.
17. D. Li, Y.-L. He, Y.-W. Liu, and G.-X. Wang, 2007, "Numerical Analysis of Cold Injury of Skin in Cryogen Spray Cooling for Dermatologic Laser Surgery," *Proceedings of IMECE2007*, ASME, IMECE2007-43876.
18. M. Faizan and G.-X. Wang, 2007, "Effect of Thermal Processing on the Dissolution of Micro/Nano-size Metal Particles in Lead-Free Composite Solders," *Proceedings of IMECE2007*, ASME, IMECE2007-42102.
19. Y.-Z. Xin, L.-Q. Li, J.-H. Qiao, and G.-X. Wang, 2007, "Analysis on Rapid Cooling and Epitaxial Solidification of a Plasma-Sprayed Yttria-Stabilized Zirconia splat on a High-Temperature Substrate," *Proceedings of IMECE2007*, ASME, IMECE2007-43266.
20. F. Sun and G.-X. Wang, 2007, "Numerical Modeling of Turbulent Flow and Heat Transfer within a Bayonet Tube," *Proceedings of IMECE2007*, ASME, IMECE2007-42520.
21. D. Li, Y.-L. He, Y.-W. Liu, and G.-X. Wang, 2007, "Numerical Analysis of Cryogen Spray Cooling of Skin in Dermatologic Laser Surgery Using Realistic Boundary Conditions," *The 22th International*

27. M. Faizan and G.-X. Wang, 2005, "Non-equilibrium Dissolution Kinetics of Micro-Size Metal Particles in Lead-Free

dimensional Flows



67. Wang, G.X., Yao, C. and Chung, B.T.F., 1999, "On Physical Mechanisms of Mushy Zone Formation







G.-X. Wang, 1986, *Experimental and Numerical Study of Natural Convection of a Slotted Circular Cylinder in Open and Enclosed Environment*, Master thesis, Xi'an Jiaotong University, Xi'an, China (In Chinese).