

## Referred Conference Proceedings - Dr. Shaochen Chen:

38. **S.C. Chen\***, "A Digital Micro-mirror Device (DMD)-based System for the Microfabrication of Complex, Spatially Patterned Tissue Engineering Scaffolds," *Proceedings of 2006 National Science Foundation DMII Grantees Conference*, Saint Louis, 2006.
37. **A. R. Battula**, **A. Heltzel**, **S. Chen\*** and **J. Howell\***, "Excitation of Surface Plasmons with Gold Microspheres," *Proc. AIAA/ASME Joint Heat Transfer Conference*, San Francisco, 2006.
36. **A.R. Battula** and **S. C. Chen\***, "Laser-Nanostructure Interactions and Applications for Parallel Nanomanufacturing", *Proceedings of SPIE-the International Society for Optical Engineering*, 2006 (**invited**)
35. **A.R. Battula**, **S. Theppakuttai** and **S.C. Chen\***, "Nanosphere-Assisted Direct-patterning of Silicon Carbide by a Nanosecond Pulsed Laser", *2005 ASME International Mechanical Engineering Congress and Exposition*, Orlando, Florida.
34. **D.B. Shao**, and **S.C. Chen\***, "Nanoscale Photolithography Using Surface-Plamons", *2005 ASME International Mechanical Engineering Congress and Exposition*, Orlando, Florida.
33. **A.W. Warren**, **Y.B. Guo\***, **S.C. Chen\***, "A Numerical Simulation of Massive Parallel Laser Shock Peening", *2005 ASME International Mechanical Engineering Congress and Exposition*, Orlando, Florida.
32. **A.R. Battula**, **S. Theppakuttai** and **S.C. Chen\***, "Nanosphere-Assisted Direct-patterning of Silicon Carbide by a Nanosecond Pulsed Laser", *International Congress on Applications of Lasers and Electro-Optics*, Florida, 2005.
31. **D. B. Shao**, **S. F. Li**, and **S. C. Chen\***, "Near-field Nano-molding of Gold Thin Films by a Pulsed Laser," *International Congress on Applications of Lasers and Electro-Optics*, Florida, 2005.
30. **A. Battula**, **S. Theppakuttai**, and **S. C. Chen\***, "Multi-photon Effects in Nanomachining of SiC by a Nanosecond Pulsed Laser", *Conference on Laser Ablation*, Banff, Canada, 2005.
29. **D.B. Shao** and **S.C. Chen\***, "Surface Plasmons-Asisted Nanoscale Photolithography", *ASME Integrated Nanosystems Conference*, Berkeley, 2005.
28. **L.H. Han** and **S.C. Chen\***, "Photo-deformation of Microshells of Nanometer Thick", *ASME Integrated Nanosystems Conference*, Berkeley, 2005.
27. **C.A. Aguilar**, **Y. Lu**, and **S. C. Chen\***, "Effect of Pulse Number and Pulse Energy on Surface Micro-Patterning of Biodegradable Polymeric Materials using Femtosecond Lasers", *ASME National Heat Transfer Conference*, San Francisco, 2005.
26. **Y. Lu**, **D.B. Shao**, and **S.C. Chen\***, "Photothermal Imprinting of Nanocomposites Using Pulsed Laser Heating", *ASME National Heat Transfer Conference*, San Francisco, 2005.

25. C.A. Aguilar, Y. Lu, and **S. C. Chen\***, “Direct Micro-patterning of Biodegradable Polymers Using Ultraviolet and Femtosecond Lasers”, *Proceedings of 2005 National Science Foundation DMII Grantees Conference*, Scottsdale, Arizona, 2005.
24. A. J. Heltzel, S. Theppakuttai, J. R. Howell\*, and **S. C. Chen\***, “Analytical and Experimental Investigation of Laser-Nanosphere Interaction for Nanoscale Surface Modification”, *Proceedings of International Mechanical Engineering Congress & Exposition*, 2004.
23. C. A. Aguilar, Y. Lu and **S.C. Chen\***, “Fabrication of Biodegradable Polymeric Microdevices Using Pulsed-Laser Micromachining,” *Proceedings of 41<sup>st</sup> Meeting of the Society of Engineering Science*, 2004.
22. Y. Lu, D. B. Shao, and **S. C. Chen\***, “Laser-assisted Photothermal Imprinting of Nanocomposite”, *Proceedings of the 15<sup>th</sup> Symposium of Solid Freeform Fabrication*, 2004.
21. S. Li, D. Y. Fozdar, D. Shao, **S. C. Chen\***, P. N. Floriano, N. Christodoulides, M. F. Ali, P. Darsham, J. T. McDevitt, D. Neikirk, “Disposable Polydimethylsiloxane/Silicon Hybrid Chips for Protein Detection”, *Proceedings of International Mechanical Engineering Congress & Exposition*, 2004.
20. S. Theppakuttai, Y. Lu, and **S. C. Chen\***, “Nanosphere-Enhanced Direct Nanopatterning of Solid Surfaces by Laser Irradiation”, *Proceedings of the 6<sup>th</sup> International Symposium on Heat Transfer*, Beijing, China, 2004.
19. S. Theppakuttai Y. Lu, and **S. C. Chen\***, “Massively Parallel Nanomanufacturing using Near-field Laser Optics,” *Proceedings of the 6<sup>th</sup> International Conference on Frontiers of Design and Manufacturing*,” Xi’an, China, 2004.
18. Y. Lu, S. Theppakuttai, and **S. C. Chen\***, “Marangoni Effect in Nanosphere-Enhanced Nanopatterning of Silicon”, *Proceedings of NSF workshop on Thermal Aspects in Manufacturing*, Stillwater, OK, 2003.
17. S. Theppakuttai, D. B. Shao, and **S. C. Chen\***, “Experimental Investigation and Numerical Simulation of Glass-Silicon Bonding by Localized Laser Heating”, *Proceedings of International Mechanical Engineering Congress & Exposition*, 2003.
16. S. Theppakuttai, Y. Lu, and **S. C. Chen\***, “Nanosphere-Enhanced Direct Nanopatterning of Solid Surfaces by Laser Irradiation”, *International Mechanical Eng Congress & Exposition*, 2003.
15. S. Li and **S. C. Chen\***, “Design and Analysis of a Heat Conduction-based Continuous Flow Polymerase Chain Reaction System”, *Proceedings of International Mechanical Engineering Congress & Exposition*, 2002.
14. V. Kancharla, K. Hendricks, and **S. C. Chen\***, “Laser Micromachining of MEMS Packaging Materials”, *Proceedings of International Mechanical Engineering Congress & Exposition*, 2001.
13. S. Li and **S. C. Chen\***, “Modeling and Optimization of a High Sensitivity Out-of-Plane Micro-gyroscope”, *Proceedings of International Mechanical Engineering Congress & Exposition*, 2001.

12. **W. Zheng** and **S. C. Chen\***, “Design, Fabrication, and Testing of a Continuous Flow, Submicroliter Scale PCR for the Analysis of Plant Genomes”, *Proceedings of International Mechanical Engineering Congress & Exposition*, 2001.
11. **S. Li** and **S. C. Chen\***, “Optimization, Simulation and Fabrication of a Microgyroscope”, *Proceedings of SPIE-the International Society for Optical Eng.*, Vol. 4559, pp. 36-42, 2001.
10. **S. Li**, **Y. Liu**, and **S. C. Chen\***, “Dynamic Modeling and Optimization of a Valveless PZT Micropump”, *Proceedings of SPIE-the International Society for Optical Engineering*, Vol. 4560, pp. 67-74, 2001.
9. **V. Kancharla**, **K. Hendricks**, and **S. C. Chen\***, “Micromachining of Packaging Materials for MEMS Using Lasers”, *Proceedings of SPIE- the International Society for Optical Engineering*, Vol. 4557, pp.220-224, 2001.
8. **W. Zheng** and **S. C. Chen\***, “Continuous Flow, Submicro-liter Scale PCR Chip for DNA Amplification”, *Proceedings of SPIE- the International Society for Optical Engineering*, Vol. 4560, pp. 256-262, 2001.
7. **S. Theppakuttai** and **S. C. Chen\***, “In-situ Monitoring of Excimer Laser Micromachining with a Dual-Beam Interferometry”, *Proceedings of the 7<sup>th</sup> Mechatronics Forum International Conference*, 2000.
6. **V. Kancharla** and **S. C. Chen\***, “Ultraviolet Excimer Laser Micro-patterning of Polymers”, *Proceedings of International Mechanical Eng. Congress & Exposition*, pp. 947-949, 2000.
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4. **S. C. Chen**, **D. G. Cahill**, and **C. P. Grigoropoulos\***, “Melting and Surface Deformation in Pulsed Laser Surface Micro-modification of NiP Disks”, *Proceedings of 33<sup>rd</sup> National Heat Transfer Conference*, pp.1-8, 1999.
3. **S. C. Chen**, **M. Q. Ye**, and **C. P. Grigoropoulos\***, “Time- and Space-resolved Imaging and Numerical Simulation of Laser Zone Texturing of Ni-P Disk Substrates”, *Proceedings of the SPIE - The International Society for Optical Engineering*, Vol. 3618, pp. 182-190, 1999.
2. **S. C. Chen** and **B. T. F. Chung\***, “Optimization of Convective Longitudinal Fins and Spines with Tip Heat Transfer and Two-dimensional Conduction Effects”, *Proceedings of 35<sup>th</sup> Heat Transfer and Fluid Mechanics Institute*, pp. 127-156, 1997.
1. **B. T. F. Chung** and **S. C. Chen\***, “Multi-objective Fuzzy Optimization for Longitudinal Fins and Spines Operating in a Convective Environment”, *HDT- Vol. 330, ASME Proceedings of 31<sup>st</sup> National Heat Transfer Conference*, Vol. 8, pp. 53-62, 1996.