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Journal Articles:

1. **P.-C. Chen***, “An Evaluation of A Real-Time Passive Micromixer to the Performance of a Continuous Flow Type Microfluidic Reactor”, *Journal of Chemical Technology & Biotechnology*, Submitted (SCI: 2.168, Rank: 32/133 in Engineering, Chemical).
2. B.-H. You, D. S. Park, **P.-C. Chen**, S.-D. Rani, I-H Song, M. C. Murphy, “Assembly tolerance analysis for double-side injection molded, modular, polymer microfluidic devices using Monte Carlo methods”, *Journal of Sensors and Actuators B*, Submitted (SCI: 3.368, Rank: 13/71 in Chemistry, Analytical).
3. **P.-C. Chen***, Kuan-Chih Kuo, “High Throughput Microfluidic Systems for Disease Detection”, *Journal of the Chinese Institute of Engineers*, Submitted (SCI: 0.295, Rank: 73/90 in Engineering, Multidisciplinary).
4. **P.-C. Chen***, Z.P. Wang, “A Rapid and Low Cost Manufacturing for Polymeric Microfluidic Devices”, *Advanced Materials Research*, v579, 348-357, 2012(EI).
5. **P.-C. Chen***, W. Fan, T.-K. Hoo, Leon C. Z. Chan, Z.P. Wang, “Simulation Guided –Design of A Microfluidic Thermal Reactor for Polymerase Chain Reaction”, *Chemical Engineering Research and Design*, v90, 591-599, 2012(SCI: 1.519, Rank: 45/134 in Engineering, Chemical).
6. W. Wong, H.-W. Chen, M. L. Hupert, **P.-C. Chen**, P. Datta, T. L. Pittaman, J. Goettert, M. C. Murphy, D. Williams, F. Barany, S. A. Soper, “ Fully Integrated Thermoplastic Genosensor for the Highly Sensitive Detection and Identification of Multi-Drug-Resistant Tuberculosis”, *Angew. Chem. Int. Ed.*, v51, 1-6, 2012 (SCI: 12.73, Rank: 5/147 in Chemistry, Multidisciplinary).
7. **P.-C. Chen**, D. S. Park, B.-H. You, N. Kim, T. Park, S. A. Soper, D. E. Nikitopoulos, M. C. Murphy, “A Nanoliter, Continuous Flow Polymerase

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8. D. S. Park, **P.-C. Chen**, B. H. You, N. Kim, T. Park, T. Y. Lee, P. Datta, Y. Desta, S. A. Soper, D. E. Nikitopoulos, M. C. Murphy, “Small Footprint Continuous Flow PCR Devices for A 96-Well CFPCR Multi-Reactor Platform”, *Journal of Micromechanics and Microengineering*, v20, 055003, 2010. (SCI: 2.276, Rank: 30/247 in Engineering, Electrical Electronic).
 9. B.-H. You, **P.-C. Chen**, D. S. Park, S. Park, D. E. Nikitopoulos, S. A. Soper, M. C. Murphy, “Passive micro-assembly, hot embossed, polymer microfluidic devices using exact constraint design, *Journal of Micromechanics and Microengineering*, v19, 125025, 2009. (SCI: 2.276, Rank: 30/247 in Engineering, Electrical Electronic).
 10. **P.-C. Chen**, D. E. Nikitopoulos, S. A. Soper, M. C. Murphy, “Temperature Distribution on CFPCR Performance”, *Journal of Biomedical Microdevices*, v10, 141-152, 2008. (SCI: 3.386, Rank: 7/69 in Engineering, Biomedical).
 11. M. Hashimoto, **P.-C. Chen**, M. W. Mitchell, D. E. Nikitopoulos, S. A. Soper, and M. C. Murphy, “Rapid PCR in a Continuous Flow Device”, *Lab on a Chip*, v4, 2004, 638-645, 2004. (SCI: 6.260, Rank 7/71 in Biochemical Research Method).

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1. **P.-C. Chen**, Z.P. Wang, “Micromilling Manufacturing for Polymeric Bioschips”, International Conference on Bioscience, Biotechnology and Healthcare Sciences, 1212507, Dec. 2012, Singapore.
2. C. R. Brown, B. Farshchian, **P.-C. Chen**, T. Park1, S. Park, M. C. Murphy, “Parametric Investigation of Gasketless Microfluidic Interconnect”, ASME International Mechanical Engineering Congress and RD&D Expo, IMECE 89634, Nov. 2012, Houston, TX, USA.
3. **P.-C. Chen**, Z.P. Wang, “A rapid and low cost manufacturing for polymeric microfluidic devices”, International Conference on Advanced Manufacturing, March. 2012, I-Lan, Taiwan.
4. C. R. Brown, B. Farshchian, **P.-C. Chen**, T. Park, S. Park, M. C. Murphy, “Novel, gasketless, interconnect using parallel superhydrophobic surfaces for modular microfluidic systems”, ASME International Mechanical Engineering Congress and RD&D Expo, IMECE 64073, Nov. 2011, Denver, CO, USA.
5. **P.-C. Chen**, F. Wei, L. Chan, T.K. Hoo, Z.P. Wang, “Development of Thermal Reactors on Microfluidic Platforms for Integrated Systems”, Advances in microfluidics and nanofluidics and Asian-Pacific International Symposium on Lab on Chip (AMN), Jan. 2011, Singapore.
6. D.S. Park, V. Singh, B.H. You, N. Kim, **P.-C. Chen**, S.A. Soper, D.E. Nikitopoulos, M.C. Murphy, ” Control of internal stress for high quality nickel large area mold inserts”, ASME International Mechanical Engineering Congress and RD&D Expo, IMECE 80879, Nov. 2009, Lake Buena Vista, FL.
7. D.S. Park, H. Wang, **P.-C. Chen**, T. Park, N. Kim, B.H. You, D.E. Nikitopoulos, S.A. Soper, M.C. Murphy, “Passive Micro-Assembly of a Fluidic Control Chip and a Multi-Well Continuous Flow PCR Chip for High Throughput Applications”, 2010 MicroTAS, Groningen, Netherlands.
8. **P.-C. Chen**, D. S. Park, B. H. You, N. Kim, T. Park, S. A. Soper, D. E. Nikitopoulos, M. C. Murphy, “ A High Throughput Microfluidic Thermal

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- 9. **P.-C. Chen**, D. S. Park, B. H. You, N. Kim, T. Park, S. A. Soper, D. E. Nikitopoulos, M. C. Murphy, “A Disposable High Throughput MicroFluidic Thermal Reactor”, 2009 MicroTAS, Jeju, Korea.
 - 10. **P.-C. Chen**, D. S. Park, B. H. You, N. Kim, T. Park, P. Datta, Y. Desta, S. A. Soper, D. E. Nikitopoulos, M. C. Murphy, “Design and performance of a Rapid, Nanoliter, Continuous Flow Polymerase Chain Reactor for A High Throughput Microsystem”, 2008 MicroTAS, San Diego, CA.
 - 11. J. M. Emory, Z. Peng, F. Crawford-Drake, **P.-C. Chen**, M. C. Murphy, S. A. Soper, “A compact microfluidic system with integrated optical system for single-molecule detection via fluorescence resonance energy transfer for real-time molecular analyses”, 2008 MicroTAS, San Diego, CA.
 - 12. **P.-C. Chen**, H. Wang, D.-S. Park, S. Park, D. E. Nikitopoulos, S. A. Soper, M. C. Murphy, “Protein Adsorption in a Continuous Flow Microchannel Environment”, ASME International Mechanical Engineering Congress and RD&D Expo, IMECE 68094, Oct. 2008, Boston, MA.
 - 13. **P.-C. Chen**, D. S. Park, B. H. You, N. Kim, T. Park, T. Y. Lee, P. Datta, Y. Desta, S. A. Soper, D. E. Nikitopoulos, M. C. Murphy, “A Thermal System for A High Throughput Continuous Flow PCR Device (CFPCR)”, ASME International Mechanical Engineering Congress and RD&D Expo, IMECE 68975, Oct. 2008, Boston, MA.
 - 14. D. S. Park, **P.-C. Chen**, B. H. You, N. Kim, T. Park, T. Y. Lee, P. Datta, Y. Desta, S. A. Soper, D. E. Nikitopoulos, M. C. Murphy, “Small Footprint Continuous Flow PCR Devices for A 96-Well CFPCR Multi-Reactor Platform”, Sensors and Actuators 2008 p 114-117, Hilton Head, SC.
 - 15. **P.-C. Chen**, B. H. You, D. S. Park, S. Park, J. Guy, D. E. Nikitopoulos, S. A. Soper, and M. C. Murphy, “Replication of Reliable Assembly Features for Polymer Modular Microfluidic Systems”, ASME International Mechanical Engineering Congress and RD&D Expo, IMECE 42206, Nov. 2007, Seattle, WA .
 - 16. B. H. You, D. S. Park, **P.-C. Chen**, W. M. Caceres, D. E. Nikitopoulos, S. A. Soper, and M. C. Murphy, “Dimensional and Locational Integrity in the Replication of Polymeric Microdevices”, InterPACK 2007, IPACK-33482, July 2007, Vancouver, Canada.
 - 17. **P.-C. Chen**, D. E. Nikitopoulos, S. A. Soper, M. C. Murphy, “Assessment and Improvement of the Thermal Performance of a Micro Polycarbonate Continuous Flow Polymerase Chain Reactor (CFPCR)”, InterPACK 2007, IPACK-33330, July 2007, Vancouver, Canada.
 - 18. **P.-C. Chen**, D. E. Nikitopoulos, S. A. Soper, M. C. Murphy, “Performance of Continuous Flow Polymerase Chain Reactor”, TexMEMS WorkShop VIII, Oct. 2006, University of Texas-Dallas.
 - 19. B. H. You, **P.-C. Chen**, J. Guy, D. E. Nikitopoulos, S. A. Soper, M. C. Murphy, “Passive Alignment Structures in Modular, Polymer Microfluidic Devices”, ASME International Mechanical Engineering Congress and RD&D Expo, IMECE 16100, Nov. 2006, Chicago, IL.
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Patents

1. M. C. Murphy, D. E. Nikitopoulos, S. A. Soper, **Pin-Chuan Chen**, D. S.-W Park, M. L. Hupert, "Optimized Modular Microfluidic Device", (Pub. No. : US2009/0074637 A1, March 19th, 2009).