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Professional Affiliations

Reviewer Sensors and Acuator

ASME: Journal of Heat Transfer Journal of Electronics Packaging

IEEE MEMS conference various ASME conferences

Review Editor Frontiers in Mechanical Engineering

Member American Society of Mechanical Engineering

Member APS

Track organizer International Conference of Micro, Mini, and Nanochannels

Publications

• Van Dyke, A.S, D. Collard, M.M. Derby, A.R. Betz, *Droplet coalescence and freezing on hydrophilic, hydrophobic, and biphilic surfaces,* Applied Physics Letters, vol. 107, issue 14, 2015.

- R. Betz, J. Jenkins, C.-J. C. Kim, and D. Attinger, *Boiling heat transfer on superhydrophilic, superhydrophobic, and superbiphilic surfaces,* International Journal of Heat and Mass Transfer, vol. 57, pp. 733-741, 2013.
- Zhang, H., A.R Betz, W. Chen, and D. Attinger, *Microfluidic Formation of Monodispersed Spherical Microgels Composed of Triple-Network Crosslinking*. Journal of Applied Polymer Science, 2011.
- Betz, A.R., J. Xu, H. Qiu, and D. Attinger, *Do surfaces with mixed hydrophilic and hydrophobic areas enhance pool boiling?* Applied Physics Letters, 97, 2010.
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Conference Presentations

- Betz, A.R, J. Xu, H. Qiu, D. Attinger, *Hydrophobic patterning to enhance pool boiling*. Nanotech, 2011: Boston, Massachusetts (Oral Presentation).
- Betz, A.R, J. Jenkins, C.-J. Kim, D. Attinger, Nano-Engineered Surfaces with Hetergeneous Wettability for Heat Tranfser Enhancement. AMSE Intermational Conference on Nanochannels, Microchannels and Minichannels, 2011: Edmonton, Canada (Accepted for Oral Presentation).
- Betz, A.R, J. Jenkins, J. Xu, H. Qiu, C.-J. Kim, D. Attinger, Significant boiling enhancement with surfaces combining superhydrophilic and superhydrophobic patterns. IEEE MEMS 2011, Cancun, Mexico. (Poster presentation).
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- Betz, A.R., H. Zhang, W. Chen and D. Attinger, Microfluidic Formation of Hydrogel Particles for Drug Delivery. ASME International Conference on Nanochannels, Microchannels and Minichannels, 2010: Montreal, Canada. Paper # 30717.
- Betz, A.R. and D. Attinger, *On the use of segmented flow for the enhancement of heat transfer in microchannel heatsinks*. Nanotech, 2009: Houston. (Oral Presentation)
- Betz, A. and D. Attinger, *Bubble injection to enhance heat transfer in microchannel heat sinks*, ASME International Mechanical Engineering Congress and Exposition, 2009: Lake Buena Vista, Florida. pp. 1681-1690.