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## **BIBLIOGRAPHY**

### **I. Refereed Publications**

#### **A. Archival Journals**

- 1) \*Yu., P., Jain, A., and Prasher, R.S., 2019, "Enhanced Thermochemical Heat Capacity of Liquids: Molecular to Macroscale Modeling," *Nano and Microscale Thermophysical Engineering*,
- 2) \*Shin, S., Elzouka, M., Prasher, R.S., and Chen, R., 2019, "Far-Field Coherent Thermal Emission From Plasmonic Resonance in Individual Anisotropic Nanoribbons," *Nature Communications*, Vol. 10, 1377
- 3) \*Wang, H., Kaur, S., Elzouka, M., and Prasher, R.S., 2019, "A Nano Photonic Infrared Radiative Heater," *Applied Thermal Engineering*, Vol. 153, 221
- 4) \*Wang, H., Haechler, I., Kaur, S. and Prasher, R.S., 2018, "Spectrally Selective Solar Absorber Stable up to 900 °C for 120 hrs Under Ambient Condition," *Solar Energy*, Vol 174, 305
- 5) \*Prasher, R.S., 2018, "Acoustic Mismatch Model for Thermal Contact Conductance of Van Der Waals Contacts Under Static Force," *Nano and Microscale Thermophysical Engineering*, Vol. 22, 1
- 6) \*Freedman, J., Wang, H., and Prasher, R.S., 2018, "Analysis of Nanofluid-Based Parabolic Trough Collectors for Solar Thermal Applications," *Journal of Solar Energy Engineering*, Vol. 140, 051008
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- 15) Lee, S. et al., 2014, "Experimental investigation of the latent heat of vaporization in aqueous nanofluids," *App. Phys. Lett.*, Vol. 104, 151908
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- 17) Taylor, R. et. al., 2013, "Small particle big impacts: A review of the diverse application of nanofluids," *Journal of Applied Physics*, Vol. 113, 11301
- 18) Gunawan, A., 2013, "Liquid thermoelectrics: Review of recent and limited new data of thermogalvaic cell experiments," *Nanoscale and Microscale Thermophysical Engineering*, Vol. 17, 304
- 19) Miner, M.J. et al., 2013, "Optimized expanding microchannel geometry for flow boiling," *J. of Heat Transfer*, Vol. 135, 042901
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## **B. Refereed Conference and Symposium Proceedings**

- 1) Gunawan, A., and Prasher, R. et al., 2013 "Electrode Separation and Operating Orientation: Mechanisms for Maximizing Performance of Cu/Cu<sup>2+</sup>Aqueous Thermogalvanic Cells," ASME 2013 International Mechanical Engineering Congress and Exposition, San Diego, California, USA, November 15–21
- 2) Taylor R., and Prasher, R. et al., 2012, "Critical Review of the Novel Applications and Uses of Nanofluids," ASME 2012 Third International Conference on Micro/Nanoscale Heat and Mass Transfer, Atlanta, Georgia, USA, March 3–6
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- 10) R. Prasher and J-Y Chang, 2008, "Cooling of Microelectronics Chips Using Microchannels and Micro-Pin Fin Heat Exchangers," Proc. of Sixth Int. ASME Conference on Nanochannels, Microchannels and Minichannels, June 23-25, Darmstadt, Germany



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- 15) J-Y. Chang, C-U. Kim, N. Michael, B. Pathangey, P. Gwin and R. Prasher, 2006, "New Electrochemical Cell Designs and Test Methods For Corrosion Testing of The Components in Integrated Circuit Cooling Systems," Proc. Int. Mech. Eng. Cong. and Expo, Chicago, Illinois, Nov. 5 - 10
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## II. Non-refereed Publications

### A. Technical Reports

- 1.

### B. Non-Refereed Conference and Symposium Proceedings

- 1.

### C. Articles in Nonarchival Magazines or Journals

- 1) Mahajan, R., Chiu, C-P., and Prasher, R.S., 2005 "Thermal Interface Materials: a Brief Review of Design Characteristics and Materials," *Electronics Cooling*, Vol. 10, No. 1
- 2) Sauciuc, I., Prasher, R.S., Chang, J-Y., Mahajan, R., and Migliaccio, 2005 "Bearing Life: A Future Package Cooling Challenge," *Advanced Packaging*, July, 2005

## III. Books

1.

#### IV. Book Chapters

- 1) R. Prasher, & C-P Chiu, "Thermal Interface Materials," Materials for Advanced Packaging, Springer (D. Lu & C.P. Wong eds.)
- 2) A. Bar-Cohen, A. Watwe, R.S. Prasher, "Heat Transfer in Electronic Equipment," Hand book of heat transfer, Wiley (A. Bejan, and A.D. Kraus eds.)
- 3) P. Phelan, P. Bhattacharya, R. Prasher, "Nanofluids for Heat Transfer Applications," Ann. Rev. of Heat Tran., Vol. 14 (2005)
- 4) P. Phelan et al., "Light Induced Energy Conversion in Liquid Nanoparticle suspension," Advances in numerical heat transfer, Vol. 1V (2013)

#### V. Other (e.g., Patents)

PAT. NO.	Title
1 7,957,137	Method for cooling an integrated circuit die with coolant flow in a microchannel and a thin film thermoelectric cooling device in the microchannel
2 7,633,752	Cooling an integrated circuit die with coolant flow in a microchannel and a thin film thermoelectric cooling device in the microchannel
3 7,576,432	Using external radiators with electroosmotic pumps for cooling integrated circuits
4 7,498,672	Micropin heat exchanger
5 7,435,623	Integrated micro channels and manifold/plenum using separate silicon or low-cost polycrystalline silicon
6 7,365,980	Micropin heat exchanger
7 7,309,453	Coolant capable of enhancing corrosion inhibition, system containing same, and method of manufacturing same
8 7,259,965	Integrated circuit coolant microchannel assembly with targeted channel configuration
9 7,253,523	Reworkable thermal interface material
10 7,243,705	Integrated circuit coolant microchannel with compliant cover
11 7,218,519	Thermal management arrangement with a low heat flux channel flow coupled to high heat flux channels

- 12 7,212,405 Method and apparatus for providing distributed fluid flows in a thermal management arrangement
- 13 7,115,987 Integrated stacked microchannel heat exchanger and heat spreader
- 14 7,104,313 Apparatus for using fluid laden with nanoparticles for application in electronic cooling
- 15 7,071,552 IC die with directly bonded liquid cooling device
- 16 7,031,159 Parallel heat exchanger for a component in a mobile system
- 17 6,992,382 Integrated micro channels and manifold/plenum using separate silicon or low-cost polycrystalline silicon
- 18 6,992,381 Using external radiators with electroosmotic pumps for cooling integrated circuits
- 19 6,981,849 Electro-osmotic pumps and micro-channels
- 20 6,934,154 Micro-channel heat exchangers and spreaders
- 21 6,906,919 Two-phase pumped liquid loop for mobile computer cooling
- 22 6,903,930 Parallel heat exchanger for a component in a mobile system
- 23 6,903,929 Two-phase cooling utilizing microchannel heat exchangers and channeled heat sink
- 24 6,751,837 Method of heat extraction from an integrated circuit die
- 25 6,696,635 Thermoelectrically cooling electronic devices
- 26 6,661,660 Integrated vapor chamber heat sink and spreader and an embedded direct heat pipe attachment
- 27 6,639,799 Integrated vapor chamber heat sink and spreader and an embedded direct heat pipe attachment
- 28 6,625,022 Direct heatpipe attachment to die using center point loading
- 29 6,535,386 Electronic assembly having a heat pipe that conducts heat from a semiconductor die
- 30 6,504,721 Thermal cooling apparatus
- 31 6,469,893 Direct heatpipe attachment to die using center point loading
- 32 6,381,135 Loop heat pipe for mobile computers
- 33 6,365,821 Thermoelectrically cooling electronic devices
- 34 6,351,387 System and method of heat extraction from an integrated circuit die
35. 0133814 A1 Fuel-Flexible Thermal Power Generator For Electric Loads
- 36 / 0366629 A1 Thermoelectric Device for High Temperature Applications

