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BASIC
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Research Papers: Conduction

Analysis of Microheat Pipes With Axial Conduction in the Solid Wall

Yew Mun Hung and Kek-Kiong Tio

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Transfer. 2010;132(7):071301-
071301-11.
doi:10.1115/1.4000947.

Research Papers: Electronic Cooling

Numerical Analysis of Convective Heat Transfer From an Elliptic Pin Fin Heat Sink With and Without Metal Foam Insert

Hamid Reza Seyf and Mohammad Layeghi

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Transfer. 2010;132(7):071401-
071401-9.
doi:10.1115/1.4000951.

Proper Orthogonal
Decomposition for Reduced

Order Thermal Modeling of Air Cooled Data Centers

Emad Samadiani and Yogendra Joshi

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Transfer. 2010;132(7):071402-
071402-14.
doi:10.1115/1.4000978.

Research Papers: Evaporation, Boiling,
and Condensation

Enhancement of Saturation Boiling of PF-5060 on Microporous Copper Dendrite Surfaces

Mohamed S. El-Genk and Amir F. Ali

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Transfer. 2010;132(7):071501-
071501-9.
doi:10.1115/1.4000975.

Research Papers: Forced Convection

Laminar Forced Convection Flow Past an In-Line Elliptical Cylinder Array With Inclination

Esam M. Alawadhi

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071701-10.
doi:10.1115/1.4000061.

High Rotation Number
Effect on Heat Transfer in a

Triangular Channel With 45 deg, Inverted 45 deg, and 90 deg Ribs

Yao-Hsien Liu, Michael Huh, Je-Chin Han and Hee-Koo Moon

*J. Heat**Transfer*. 2010;132(7):071702-071702-10.

doi:10.1115/1.4000986.

Research Papers: Heat Exchangers

Air-Side Heat-Transfer

Enhancement by a New Winglet-Type Vortex Generator Array in a Plain-Fin Round-Tube Heat Exchanger

J. He, L. Liu and A. M. Jacobi

*J. Heat**Transfer*. 2010;132(7):071801-071801-9.

doi:10.1115/1.4000988.

Research Papers: Micro/Nanoscale Heat Transfer

Viscous Dissipation and Rarefaction Effects on Laminar Forced Convection in Microchannels

Arman Sadeghi and Mohammad Hassan Saidi

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doi:10.1115/1.4001100.

Raman Thermometry
Measurements and Thermal

Simulations for MEMS Bridges at Pressures From 0.05 Torr to 625 Torr

Leslie M. Phinney, Justin R. Serrano, Edward S. Piekos, John R. Torczynski, Michael A. Gallis and Allen D. Gorby

*J. Heat**Transfer*. 2010;132(7):072402-072402-9.

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Thermal Wave Based on the
Thermomass Model

Zeng-Yuan Guo and Quan-Wen Hou

*J. Heat**Transfer*. 2010;132(7):072403-072403-6.

doi:10.1115/1.4000987.

Research Papers: Radiative Heat Transfer

Numerical Studies on Microwave Heating of Thermoplastic-Ceramic Composites Supported on Ceramic Plates

Tanmay Basak and Sankaran Durairaj

*J. Heat**Transfer*. 2010;132(7):072701-072701-12.

doi:10.1115/1.4000948.

Numerical Determination of
Radiative View Factors Using

Ray Tracing

T. Walker, S.-C. Xue and G. W. Barton

*J. Heat**Transfer*. 2010;132(7):072702-072702-6.

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Reduced Models for
Radiative Heat Transfer

Analysis Through Anisotropic Fibrous Medium

Hervé Thierry Tagne Kamdem and Dominique Doermann Baillis

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Direct Numerical Simulation of Near Field Thermal Radiation

Based on Wiener Chaos Expansion of Thermal Fluctuating Current

Sy-Bor Wen

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doi:10.1115/1.4000995.

Max Jakob Award Paper

Airflow and Cooling in a

Data Center

Suhas V. Patankar

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Transfer. 2010;132(7):073001-073001-17.
doi:10.1115/1.4000703.

Technical Briefs

Multiphase Forced Convection Cooling by ABS Plastic or Encapsulated Paraffin Beads

Fatemeh Hassanipour and José L. Lage

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Transfer. 2010;132(7):074501-074501-3.
doi:10.1115/1.4000710.

Network Modeling of Fin-and-Tube Evaporator

Performance Under Dry and Wet Conditions

Ling-Xiao Zhao, Liang Yang and Chun-Lu Zhang

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doi:10.1115/1.4000950.

The Onset of Convection in a Layer of Cellular Porous

Material: Effect of Temperature-Dependent Conductivity Arising From Radiative Transfer

D. A. Nield and A. V. Kuznetsov

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