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Thermal Protection of a Ground Layer With Phase Change Materials

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doi:10.1115/1.3194764.

Research Papers: Electronic Cooling

Optimal Heat Distribution

Among Discrete Protruding Heat Sources in a Vertical Duct: A Combined Numerical and Experimental Study

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Research Papers: Evaporation, Boiling, and Condensation

Subcooled Boiling Heat Transfer for Turbulent Flow of Water in a Short Vertical Tube

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Research Papers: Forced Convection

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Sources in Convergent Channels Cooled by Laminar Forced Convection

E. Jassim and Y. S. Muzychka

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Three-Dimensional Magnetic Fluid Boundary Layer Flow

Over a Linearly Stretching Sheet

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Research Papers: Heat Exchangers

Heat Transfer and Friction

Factor of Coil-Springs Inserted in the Horizontal Concentric Tubes

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Exergy Study of Fouling Factors in Heat Exchanger Networks

Zunlong Jin, Qiwu Dong and Minshan Liu

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Research Papers: Micro/Nanoscale Heat Transfer

Thermal Properties for Bulk Silicon Based on the Determination of Relaxation Times Using Molecular Dynamics

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Molecular-Scale Mechanism of Thermal Resistance at the Solid-Liquid Interfaces: Influence of Interaction Parameters Between Solid and Liquid Molecules

Daichi Torii, Taku Ohara and Kenji Ishida

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Measurement of the Heat Capacity of Copper Thin Films

Using a Micropulse Calorimeter

Jun Yu, Zhen'an Tang, Fengtian Zhang, Haitao Ding and Zhengxing Huang

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Boundary Conditions and Evolution of Ballistic Heat Transport

Transport

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Research Papers: Natural and Mixed Convection

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A. F. Emery, M.-H. H. Wu and A. M. Mescher

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Natural Convection Inside a Bidisperse Porous Medium

Enclosure

Arunn Narasimhan and B. V. K. Reddy

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Study and Optimization of Horizontal-Base Pin-Fin Heat

Sinks in Natural Convection and Radiation

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Technical Briefs

Non-Darcy Mixed Convection With Thermal Dispersion in a Saturated Porous Medium

V. V. Sobha, R. Y. Vasudeva, K. Ramakrishna and K. Hema Latha

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Initial Buoyancy Reduction in Exhausting Smoke With Solar

Chimney Design

C. L. Chow and W. K. Chow

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Buoyant Convection in Superposed Metal Foam and

Water Layers

V. Kathare, F. A. Kulacki and Jane H. Davidson

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Intraband Excitations to Electron**Heat Capacity and Electron-Phonon Coupling in Noble Metals**

Patrick E. Hopkins

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