

Review

Heat transfer—A review of 2003 literature

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Abstract

The present paper is intended to encompass the English language heat transfer papers published in 2003, including some translations of foreign language papers. This survey, although extensive cannot include every paper; some selection is necessary. Many papers reviewed herein relate to the science of heat transfer, including numerical, analytical and experimental works. Others relate to applications where heat transfer plays a major role not only in man-made devices, but in natural systems as well. The papers are grouped into categories and then into sub-fields within these categories. We restrict ourselves to papers published in reviewed archival journals.

Besides reviewing the journal articles in the body of this paper, we also mention important conferences and meetings on heat transfer and related fields, major awards presented in 2003, and books on heat transfer published during the year.

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Keywords: Conduction; Boundary layers; Internal flows; Porous media; Heat transfer; Experimental methods; Natural convection; Rotating flows; Mass transfer; Bio-heat transfer; Melting; Freezing; Boiling; Condensation; Radiative heat transfer; Numerical methods; Transport properties; Heat exchangers; Solar energy; Thermal plasmas

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