

PERGAMON

International Journal of Heat and Mass Transfer 41 (1998) 3341-3356

Heat transfer bibliography—Japanese works 1996

I. Tanasawa,^a S. Nishio,^b K. Suzuki^c

^aDepartment of Mechanical Systems Engineering, Tokyo University of Agriculture and Technology, 2-24-16 Nakacho, Koganei, Tokvo 184. Japan

^bInstitute of Industrial Science, University of Tokyo, 7-22-1 Roppongi, Minato-ku, Tokyo 106, Japan ^cDepartment of Mechanical Engineering, Kyoto University, Yoshidahonchyo, Sakyo-ku, Kyoto 606-01, Japan

Conduction

- Hirasawa S, Nakazato N, Yoshihara K, Nagai K, Yamaguchi H, Owada N. Thermal analysis of SOI transistor devices in LSI chips. Transactions of the Japan Society of Mechanical Engineers 1996;B62(593):405.
- Nemoto E. Analytical method of the unsteady heat conduction in anisotropic materials by a congruence matrix transformation. Transactions of the Japan Society of Mechanical Engineers 1996;B62(604):4189.
- Ochiai Y. Two-dimensional unsteady heat conduction analysis by improved multiple-reciprocity boundary element method. Transactions of the Japan Society of Mechanical Engineers 1996;B62(600):3125.
- Tang D-W, Araki N. Propagation of non-Fourier temperature wave in finite medium under laser-pulse heating. Transactions of the Japan Society of Mechanical Engineers 1996;B62(595):1136.
- Tang D.-W, Araki N. Propagation of non-Fourier temperature wave in finite medium under laser-pulse heating (2nd report, non-uniform absorption in the direction of thickness of laser irradiation with Gaussian temporal profile). Transactions of the Japan Society of Mechanical Engineers 1996;B62(604):4183.
- Utsumi T, Kunigi T. Numerical analysis for thermal waves in gas generated by impulsive heating of a boundary surface. Thermal Science and Engineering 1996;4(3):1.

Natural Convection

- Abe Y, Yoshioka K. Effect of model constant on buoyancydriven turbulent heat transfer in a rectangular square cavity. Reports of the Faculty of Engineering Oita University 1996·No 33·9
- Araki K, Yanase S, Mizushima J. Symmetry breaking by differential rotation and saddle-node bifurcation of the thermal convection in a spherical shell. Journal of the Physical Society of Japan 1996;65(12):3862(in English).
- Hattori Y. Experimental study for basic heat transfer characteristics of a turbulent natural convection boundary layer, CRIEPI (Central Research Institute of Electronic Power Industry) Report No. T95064, 1996, 1.
- Ichimiya K, Abe T. Impingement heat transfer of a thermal
- 0017-9310/98 \$19.00 © 1998 Elsevier Science Ltd. All rights reserved PII: S0017-9310(98)00038-6

plume on upper wall. Transactions of the Japan Society of Mechanical Engineers 1996;B62(601):3446.

International Journal of HEAT and MASS TRANSFER

- Iida S, Ogawara K. Bifurcation structure of Lorenz-type fiveequation model in thermal convection. JSME International Journal 1996;B39(1):36 (in English).
- Iida S, Ogawara K, Furusawa S. A study on bifurcation control using pattern recognition of thermal convection. JSME International Journal 1996;B39(4),762 (in English).
- Kimura T, Takeuchi M, Nagai N, Hirano M. Experimental study of natural convection heat transfer in semicircular enclosure. Transactions of the Japan Society of Mechanical Engineers 1996;B62(602):3661.
- Kitahara N. Numerical analysis for solving the electromagnetic convection problems in a hemispherical container. Research Reports of Maizuru College of Technology 1996;No.31:26.
- Kudo K, Kuroda A, Tanaka T, Yang W-J. Effect of support rod on surface-tension driven convection within a droplet. Transactions of the Japan Society of Mechanical Engineers 1996;B62(594):763.
- Misumi T, Kitamura K. Heat transfer enhancement of turbulent natural convection adjacent to vertical heated plate. Transactions of the Japan Society of Mechanical Engineers 1996;B62(596):1523.
- Mlaouah H, Tsuji T, Nagano Y. Thermal convection in an enclosure with large temperature difference. Transactions of the Japan Society of Mechanical Engineers 1996;B62(594):756.
- Nakai T, Tanahashi T. Numerical analysis of natural convection in thermoelectically conducting fluids in a cubic cavity under a constant magnetic field (1st report, effect of perpendicular magnetic field, comparison of visualized experimental results). Transactions of the Japan Society of Mechanical Engineers 1996;B62(602):3584.
- Nishihara T. Analytical study on stability characteristics and nonlinear behavior of a single-phase natural circulation flow in a closed loop, CRIEPI (Central Research Institute of Electronic Power Industry) Report No.T95022, 1995; 1.
- Nishimura M, Shibazaki H, Fujii S, Maekawa I. Natural convection heat transfer in the horizontal dry storage system for the LWR spent fuel assemblies. Journal of Nuclear Science and Technology 1996;33(11):821 (in English).
- Nishimura T, Imoto T, Wakamatsu M. A numerical study of double-diffusive natural convection in a rectangular enclosure filled with binary gas. Transactions of the Japan Society of Mechanical Engineers 1996;B62(593):271.

- Oki Y, Tanahashi T. Numerical analysis of natural convection to thermoelectrically conducting fluids in a square cavity under a uniform magnetic field (calculated results, frequency characteristics). JSME International Journal 1996;B39(3):508 (in English).
- Oyama Y, Terasi K, Taruno. Heat transfer enhancement of free convection from a heated horizontal square plate. Transactions of the Japan Society of Mechanical Engineers 1996;B62(600):3137.
- Sakamoto Y, Kunugi T, Ichimiya K. Numerical analyses of buoyancy-driven flow with properties that depend on the local temperature. Thermal Science and Engineering 1996;4(3):17.
- Suzuki T, Mitachi K, Yokoo H. Fluid motion and heat transmission in a horizontal liquid layer heated locally from free surface. JSME International Journal 1996;B39(4):780 (in English).
- Suzuki T, Okada M. Natural convection of water-fine particle suspension in a rectangular cell. Transactions of the Japan Society of Mechanical Engineers 1996;B62(593):241.
- Yamada J, Miyazaki T, Hosokawa I. Linear instability of mixed convection in a rectangular duct heated from below. Journal of Japan Society of Fluid Mechanics 1996;15(50):417.
- Zhang G-L, Hanzawa T, Sakai N. Heat transfer by natural convection in rectangular cavities with low Grashof number and various heater locations. Journal of Chemical Engineering Japan 1995;29(4):603 (in English).

Forced convection

- Aragaki T, Taki H, Uchikawa T, Iwata S, Mori H, Miyashita H, Yoshida M. Numerical analysis of turbulent flow and heat transfer in parallel plates attached with turbulence promoters at regular intervals on lower surface. Journal of Chemical Engineering Japan 1995;29(3):407 (in English).
- Aso S, Miyamoto Y, Isomura Y, Kurotaki T, Kurosaki R, Katayama M. Experimental study on heat protection of blunt body with film cooling. Technology Reports Kyushu University 1996;69(3):359.
- Hamaguchi S, Sakuma W, Okamura T, Kabashima S. Twodimensional heat transport in pressurized He II channel. Cryogenetic Engineering 1996;31(7):373.
- Hori M, Yata J, Minamiyama T. Effects of free stream turbulence on turbulent boundary layer on a flat plate with zero pressure gradient (4th report, the calculation of flow field). Transactions of the Japan Society of Mechanical Engineers 1996;B62(596):1538.
- Hori M, Yata J, Minamiyama T. Effects of free stream turbulence on turbulent boundary layer on a flat plate with zero pressure gradient (5th report, the calculation of heat transfer). Transactions of the Japan Society of Mechanical Engineers 1996;B62(596):1544.
- Hyun G-S., Nogami M, Senda J, Fujimoto H. Numerical Analysis of transient gas jet and wall impinging jet by discrete vortex method. Transactions of the Japan Society of Mechanical Engineers 1996;B62(597):1998.
- Ichimiya K, Matsumoto H, Okumura K. Heat transfer characteristics of an annular turbulent impinging jet. Transactions of the Japan Society of Mechanical Engineers 1996;B62(599):2737.

- Igarashi T, Terachi N. Heat transfer enhancement and drag reduction of flat plate normal to airstream (flow control using a rod). Transactions of the Japan Society of Mechanical Engineers 1996;B62(597):1945.
- Ikegame M, Kawanabe H, Shioji M. Analysis of stability of a two-dimensional jet with density variation. Transactions of the Japan Society of Mechanical Engineers 1996;B62(594):783.
- Inagaki T. Turbulent heat transfer with combined forced and natural convection in a vertical flow system and its criterion standard. Journal of the Faculty of Engineering, Ibaraki University 1996;44:1.
- Ishigaki H. Flow and heat transfer in rotating curved pipes (the effects of Rossby number). Transactions of the Japan Society of Mechanical Engineers 1996;B62(597):1788.
- Ishigaki H. Laminar flow and heat transfer in a square duct rotating around a perpendicular axis. Transactions of the Japan Society of Mechanical Engineers 1996;B62(597):1795.
- Ishikawa T, Ohnuma S, Kamiya T. Transitional process of flow and heat transfer in a circular pipe with short static mixer. Kagaku Kogaku Ronbunshu (Transactions of Chemical Engineering Japan) 1996;22(4):875.
- Ishino Y, Suzuki M, Abe T, Ohiwa N, Yamaguchi S. Flow and heat transfer characteristics in pulsating pipe flows (effects of pulsation on internal heat transfer in a circular pipe flow). Transactions of the Japan Society of Mechanical Engineers 1996;B62(597):1928.
- Itoh T, Kawamura H. Modeling of turbulent scalar flux in homogeneous turbulence. Transactions of the Japan Society of Mechanical Engineers 1996;B62(593):263.
- Iwai H, Nakabe K, Suzuki K. Three-dimensional simulation of backward-facing step flow and heat transfer in a rectangular duct. Transactions of the Japan Society of Mechanical Engineers 1996;B62(599):2729.
- Jiayu X, Nakagawa N, Kato K. Thermal analysis in a channel between vertical electronic circuit boards cooled by forced convection. Journal of Chemical Engineering Japan 1995;29(6):967 (in English).
- Kanzaki T, Sada K, Ichikawa Y.The effects of thermal stratification and turbulent mixing on heat transfer in a gridgenerated flow with stable stratification, CRIEPI (Central Research Institute of Electric Power Industry) Report No.T95032, 1996, 1.
- Kitamura K, Fujiwara K. Fluid flow and heat transfer of opposing mixed convection adjacent to a vertical, heated cylinder. Transactions of the Japan Society of Mechanical Engineers 1996;B62(604):4204.
- Kondo Y, Matsushima H. Prediction algorithm of thermal resistance in the case of pin-fin heat sinks for LSI packages using impingement cooling. Transactions of the Japan Society of Mechanical Engineers 1996;B62(595):1164.
- Kondo Y, Matsushima H. Study of impingement cooling of heat sinks for LSI packages with longitudinal fins. Transactions of the Japan Society of Mechanical Engineers 1996;B62(596):1549.
- Kondo Y, Matsushima H, Komatsu T. Experimental study of impingement cooling by heat sinks with thin longitudinal fins for LSI packages. Transactions of the Japan Society of Mechanical Engineers 1996;B62(596):1557.
- Kyomen S, Usui T, Fukuwa M, Ohmi M. Combined free and forced convection for laminar steady flow in horizontal

tubes. JSME International Journal 1996;B39(1):44 (in English).

- Matsubara K, Nakabe K, Suzuki K. Flow and heat transfer in a channel with fins attached to one wall. Transactions of the Japan Society of Mechanical Engineers 1996;B62(602):3675.
- Matsubara K, Nakabe K, Suzuki K. Linear stability analysis for channel flow with two ribs attached to one wall. Transactions of the Japan Society of Mechanical Engineers 1996;B62(599):2762.
- Momose K, Sasoh K, Kimoto H. Fredholm-type integral expression of forced convection heat transfer coefficient and its application to conjugated heat transfer problem. Transactions of the Japan Society of Mechanical Engineers 1996;B62(599):2751.
- Nagata K, Komori S. Direct numerical simulation of the Prandtl number effects on the countergradient scalar transfer in strong stable stratification. Transactions of the Japan Society of Mechanical Engineers 1996;B62(600):3142.
- Naito E, Nagano Y. Effect of body force on forced-convection in the thermal entrance region of symmetrically or asymmetrically cooled vertical channel with the air upward-flow. Transactions of JAR 1996;13(2):143.
- Naitoh E, Nagano Y. Combined forced and free convection in the thermal entrance region between vertical parallel plates with upward flow of low Prandtl-number fluids. Kagaaku Kogaku Ronbunshu (Transactions of Chemical Engineering Japan) 1996;22(3):566.
- Nakabe K, Hasegawa H, Matsubara K, Suzuki K. Numerical simulation of combined convection heat transfer from heated cylinder mounted in flow between parallel plates. Transactions of the Japan Society of Mechanical Engineers 1996;B62(597):1937.
- Nakagawa N, Jiayu X, Shibui K, Kato K. Forced convective heat transfer from a channel between vertical electronic circuit boards. Journal of Chemical Engineering Japan 1995;29(6):960 (in English).
- Ozawa M, Takifuji T, Kawamoto A. Convective heat transfer induced by fluid oscillation. Transactions of the Japan Society of Mechanical Engineers 1996;B62(598):2391.
- Ono N, Yoshiba F, Watanabe T. Heat and gas flow characteristics in an MCFC stack (numerical simulation for stack performance including gas flow distribution analysis), CRIEPI (Central Research Institute of Electric Power Industry Report No.T96002, 1996, 1.
- Oyakawa K, Kawajyo Y, Senaha I, Yaga M, Mabuchi I. Heat transfer enhancement in parallel plate duct by oscillating thin plate insertion. Transactions of the Japan Society of Mechanical Engineers 1996;B62(598):2384.
- Oyakawa K, Teruya I, Senaha I, Yaga M, Mabuchi I. Evaluation of thermal performance on heat transfer enhancement by passive and active methods at downstream region of backward-facing step. Transactions of the Japan Society of Mechanical Engineers 1996;B62(595):1104.
- Ozaki K, Inaba H. Mixed convection heat transfer in an open shallow cavity heated from below and packed with onestep arrangement of spherical particles (2nd report, effect of cavity length). Transactions of the Japan Society of Mechanical Engineers 1996;B62(594):740.
- Sakai K. A new numerical scheme for convection-dominated transport equations. Journal of Nuclear Science and Technology 1996;33(1):34 (in English).

- Sakakibara J, Hishida K. Heat transfer in the stagnation region of an excited plane impinging jet. Transactions of the Japan Society of Mechanical Engineers 1996;B62(597):1962.
- Sano M. Fluid flow and heat transfer in a turbulent channel flow with insertion of a flat body. Transactions of the Japan Society of Mechanical Engineers 1996;B62(604):4197.
- Sato K, Murayama T, Ono Y. Effect of thermal resistance in a sphere on apparent convective heat transfer coefficient. Tetsu to Hagane (Journal of Iron Steel Inst. Japan) 1996;82(6):459.
- Sato T, Nishiyama H, Kamiyama S. Electromagnetic control of a nonequilibrium plasma jet impinging on a flat plate. Transactions of the Japan Society of Mechanical Engineers 1996;B62(594):519.
- Shakouchi T, Wakamatsu T, Ando T, Yasuda M. Flow and forced convective heat transfer of round impinging jet (control by coaxial annular subjet). Transactions of the Japan Society of Mechanical Engineers 1996;B62(593):248.
- Shiina K, Nakamura S, Mizushina Y, Yanagida T, Endo A, Takehara H, Narabayashi T, Kato H. Heat transfer characteristics of fluid flow in an annulus with an inner rotating cylinder having a labyrinth structure. Transactions of the Japan Society of Mechanical Engineers 1996;B62(598):2376.
- Shimada R, Hashimoto T, Adachi T, Kosuge T, Kumagai S. Control of heat transfer on wall with wall jet. Transactions of the Japan Society of Mechanical Engineers 1996;B62(595):1098.
- Sugiyama H, Akiyama M, Shimizu T. Numerical analysis of three-dimensional turbulent heat transfer in a 180°-bent tube by two-equation heat transfer models. Transactions of the Japan Society of Mechanical Engineers 1996;B62(596):1530.
- Takamatsu K, Rao YF, Fujimoto N, Fukuda K. Study of heat transfer of Helium II in capillary tubes. Engineering Sciences Reports Kyushu University (Kyushu Daigaku Sogorikogaku Kenkyuka Hokoku) 1996;18(1):263.
- Tasaka H, Tajima H. Experimental study of heat transfer coefficient in a spark ignition engine (1st report, relation between gas velocity and heat transfer coefficient under motored conditions). Transactions of the Japan Society of Mechanical Engineers 1996;B62(599):2902.
- Tsutsui T, Igarashi T. Enhancement of heat transfer and reduction of drag of a circular cylinder (flow control using a small rod). Transactions of the Japan Society of Mechanical Engineers 1996;B62(597):1802.
- Tsutsui T, Akiyama M, Sugiyama H, Shimanaka K. Heat transfer enhancement around a rectangular cylinder set in near wake generated by elastically vibrating flat plate. Transactions of the Japan Society of Mechanical Engineers 1996;B62(602):3667.
- Wakao Y, Kawamura H. Modeling of scalar transport in a turbulent channel flow consistent with the linearity principle. Transactions of the Japan Society of Mechanical Engineers 1996;B62(603):3934.
- Yamamoto H, Hattori N. Flow and heat transfer around a single row of circular cylinders. Transactions of the Japan Society of Mechanical Engineers 1996;B62(598):2371.
- Yamanaka A, Okuda M, Nakajima K. Intensive cooling method of slab just after exit of mold by high speed water film. Tetsu to Hagane (Journal of Iron Steel Institute of Japan) 1996;82(3):203.
- Yanaoka H, Ota T. Three-dimensional numerical simulation of separated and reattached flow and heat transfer over blunt

flat plate. Transactions of the Japan Society of Mechanical Engineers 1996;B62(595):1111.

- Yanaoka H, Ota T. Three-dimensional numerical simulation of laminar flow and heat transfer over blunt flat plate in a channel. Transactions of the Japan Society of Mechanical Engineers 1996;B62(596):1496.
- Yanaoka H, Ota T. Three-dimensional numerical simulation of unsteady flow and heat transfer over blunt flat plate in a channel. Transactions of the Japan Society of Mechanical Engineers 1996;B62(599):2745.
- Yanaoka H, Ota T. Three-dimensional numerical simulation of separated and reattached flow and heat transfer over blunt flat plate at high Reynolds number. Transactions of the Japan Society of Mechanical Engineers 1996;B62(601):3439.
- Yoshida M, Ishita A, Kinoshita K, Miyashita H. Heat transfer enhancement with an inclined semicylindrical turbulence promoter (the relationship between optimum clearance and film thickness). Kagaku Kogaku Ronbunshu (Transactions of Chemical Engineering Japan) 1996;22(2):309.
- Yoshiwara M. Effect of temperature non-uniformity on wall surface for convective heat transfer from an open cavity part 3: numerical calculation by heat transfer model in the case of depth-to-width ratio H/L = 1.5—. Transactions of JAR 1996;13(1):67.

Boiling and evaporation

- Amano M. Effect of fluctuation of surface sea water temperature and ambient pressure on evaporation rate of evaporator in barometric type OC-OTEC system. Bulletin of the Electrotechnical Laboratory 1996;60(6):29.
- Chikanawa K, Yoshida S, Hong H, Horio H. Generation, growth and collapse of a bubble in conductive liquid heated directly by electric current. JSME International Journal 1996;B39(4):789 (in English).
- Chikanawa K, Yoshida S, Hong H, Horio H. Generation, growth and collapse of a bubble in conductive liquid heated directly by electric current. Transactions of the Japan Society of Mechanical Engineers 1996;B62(594):692.
- Fujita Y, Tsutsui M. Heat transfer in nucleate boiling of binary mixtures (development of a heat transfer correlation). Transactions of the Japan Society of Mechanical Engineers 1996;B62(597):1906.
- Fujita Y, Tsutsui M. Heat transfer in nucleate boiling of binary mixtures (heat transfer measurement and assessment of available correlations). JSME International Journal 1996;B39(2):402 (in English).
- Furuya M. Investigations of the occurrence conditions and the mechanism of minute bubble emission boiling, CRIEPI (Central Research Institute of Electric Power Industry) Report No.T95095, 1995; 1.
- Hiromitsu N, Kawaguchi O. Influence of flow turbulence on the evaporation rate of a suspended droplet in a hot air flow (1st report, study of influence of turbulence on the evaporation rate using turbulence scale and vaporization Damkehler number). Transactions of the Japan Society of Mechanical Engineers 1996;B62(594):706.
- Iida Y, Okuyama K, Endou T, Kanda N. Boiling nucleation on a very small film heater subjected to extremely rapid heating (effect of ambient pressure on bubble formation by fluc-

tuation nucleation). Transactions of the Japan Society of Mechanical Engineers 1996;B62(600):3095.

- Ikawa H, Otsuji T, Mishima K, Hibiki T, Nishihara H. Study on downward subcooled boiling flow, 1st report. Review of Kobe University of Mercantile Marine, II. 1996;44:81.
- Kikkawa S, Senda M, Yoshimura N. Transpiration cooling of a flat plate heated by radiation using water as a coolant. Transactions of the Japan Society of Mechanical Engineers 1996;B62(603):3957.
- Kim Y-C, Nishio S, Ohkubo H. Heat transfer in high temperature region of spray cooling interacting with liquid film flow. Transactions of the Japan Society of Mechanical Engineers 1996;B62(597):1991.
- Kim Y-C, Nishio S, Ohkubo H. Spray cooling with formation of liquid film (film-boiling heat transfer of liquid film flow). Transactions of the Japan Society of Mechanical Engineers 1996;B62(594):734.
- Kinoshita H, Nariai H, Inasaki F, Yoshida T. Study on the mechanism of critical heat flux enhancement for the subcooled flow boiling in tube with internal twisted tape under non-uniform heating condition. Transactions of the Japan Society of Mechanical Engineers 1996;B62(596):1459.
- Matsumura K, Nariai H. Self-triggering mechanism of vapour explosions for a molten tin and water system. Journal of Nuclear Science and Technology 1996;33(4):298 (in English).
- Matsunaga T, Yoshida S, Mori R, Yonemaru A. Influence of oil on boiling heat transfer for film flow of refrigerant liquid. Transactions of JAR 1996;13(2):199.
- Matsuo K, Miyazato Y, Hong J-W, Furumoto H. Critical flow rate of flashing subcooled water through a converging nozzle. Engineering Sciences Reports Kyushu University (Kyushu Daigaku Sogorikogaku Kenkyuka Hokoku) 1996;18(1):11.
- Murata K. A correlation for forced convective boiling heat transfer of binary refrigerant mixtures (2nd report, a spirally grooved tube). Transactions of the Japan Society of Mechanical Engineers 1996;B62(599):2723.
- Nishi Y, Furuya M, Kinoshita I, Takenaka N, Matsubayashi M. Visualization of direct contact heat transfer between water and molten alloy. CRIEPI (Central Research Institute of Electric Power Industry) Report No.T95061, 1995; 1.
- Nishio S, Kim Y-C. Heat transfer model of spray cooling focusing on liquid sensible heat. Transactions of the Japan Society of Mechanical Engineers 1996;B62(597):1984.
- Noda T, Fujimoto N, Rao YF, Fukuda K. Study on heat transfer characteristics of Helium II with phase changes. Engineering Sciences Reports Kyushu University (Kyushu Daigaku Sogorikogaku Kenkyuka Hokoku) 1996;18(3):257.
- Ohashi S, Nakajima T, Kuwahara H. Incipience of boiling at an enhanced heat sink with a microchannel structure. Transactions of the Japan Society of Mechanical Engineers 1996;B62(601):3406.
- Oka T, Abe Y, Mori YH, Nagashima A. Pool boiling heat transfer in microgravity (experiments with CFC-113 and water utilizing a drop shaft facility), JSME International Journal 1996;B39(4):798 (in English).
- Okuyama K, Iida Y, Kato T. Premature transition to film boiling at stepwise heat generation (2nd report, effect of wall material and surface condition). Transactions of the Japan Society of Mechanical Engineers 1996;B62(595):1084.
- Sakashita H, Yasuda H, Kumada T. Studies on pool boiling

heat transfer (7th report, modification of correlation of macrolayer thickness and measurement of macrolayer thickness at low heat fluxes). Transactions of the Japan Society of Mechanical Engineers 1996;B62(598):2316.

- Sakashita H, Yasuda H, Kumada T. Studies on pool boiling heat transfer (8th report, macrolayer thickness in transition boiling). Transactions of the Japan Society of Mechanical Engineers 1996;B62(598):2323.
- Sato H, Odagawa M, Part C, Maino K, Hona H. On the behavior of pulse-laser-induced bubble in liquid nitrogen. Thermal Science and Engineering 1996;4(2):21.
- Shoji M, Ueno I, Yamazaki M, Wakamatsu K. Pressure generation by rapid heating of a metal wire in water. Transactions of the Japan Society of Mechanical Engineers 1996;B62(598):2331.
- Sudo Y. Analytical study on characteristics of critical heat flux under high subcooling and high velocity conditions. Transactions of the Japan Society of Mechanical Engineers 1996;B62(594):721.
- Sudo Y. Critical heat flux under conditions of high subcooling and high velocity at atmospheric pressure. Transactions of the Japan Society of Mechanical Engineers 1996;B62(601):3376.
- Suzuki S, Kumagai S. Subcooled forced-convective boiling heat transfer with twisted tape inserts. Transactions of the Japan Society of Mechanical Engineers 1996;B62(598):2356.
- Takahashi S, Takahashi S, Nakaya K. A study on the solution mechanism of $H_2O/1,4$ -dioxane azeotropic mixture. Research of a thermal working substance with a lower boiling point on the base of an azeotropic mixture composite of two constituents (1st report). The Bulletin of Hachinohe Institute of Technology 1996;15:106.
- Takamatsu H, Yamashiro H, Honda H. Theoretical analysis of the stability of vapour film in subcooled film boiling on a horizontal wire. Transactions of the Japan Society of Mechanical Engineers 1996;B62(600):3102.
- Takanao K, Tanasawa I, Nishio S. Enhancement of evaporation of a droplet using EHD effect (measurement of steady-state heat flux during evaporation of a single droplet. JSME International Journal 1996;B39(3):583 (in English).
- Takashima T, Iida Y. Study on the propagation process of spontaneous vapour explosion and the behavior of induced pressure wave. Transactions of the Japan Society of Mechanical Engineers 1996;B62(597):1891.
- Takata T, Shirakawa H, Tanaka K, Kuroki T, Ito T. Numerical analysis of bubble growth under electric field. Transactions of the Japan Society of Mechanical Engineers 1996;B62(595):1142.
- Takimoto A, Kosaka A, Yasuo K, Hayashi Y. Study on mist cooling of a superheated surface (heat transfer characteristics in range of small degree of superheating). Transactions of the Japan Society of Mechanical Engineers 1996;B62(603):3950.
- Tanaka M, Toshiki M, Fukuda K. On the study of transient boiling heat transfer in the pool of saturated R113 and ethanol. Review of Kobe University of Mercantile Marine, II 1996;44:75.
- Tsubota M, Tomita Y, Shima A, Kano I. Dynamics of laserinduced bubble in pressurized liquid nitrogen. JSME International Journal 1996;B39(2):257 (in English).
- Tsutsui K, Yamazaki S. A study of measurement of vapour film thickness deviation on film boiling. Research reports of Tokyo National College of Technology 1996;28:25.

- Umekawa H, Ozawa M, Miyazaki A, Mishima K, Hibiki T. Dryout in a boiling channel under oscillatory flow condition. JSME International Journal 1996;B39(2):412 (in English).
- Yamamoto Y, Morooka S, Mitsutake T, Yokobori S, Kimura J. Boiling transition phenomenon in BWR fuel assemblies: Effect of fuel spacer shape on critical power. Journal of Atomic Energy Society of Japan 1996;38(4):315.
- Yamashiro H, Honda H, Takamatsu H, Yano T. Enhancement of cooling rate during rapid quenching of a thin horizontal wire by ultrasonic vibration. Transactions of the Japan Society of Mechanical Engineers 1996;B62(603):3943.
- Yokoi Y, Sato K, Kumada M. Control of boiling utilizing inversely soluble solution. Transactions of the Japan Society of Mechanical Engineers 1996;B62(593):256.
- Yokoya S, Watanabe M, Shoji M. Upstream critical heat flux of forced convection boiling inside a uniformly heated vertical tube. Transactions of the Japan Society of Mechanical Engineers 1996;B62(597):1898.
- Zhao Y, Masuoka T, Tsuruta T. Prediction of critical heat flux based on the microlayer model. Transactions of the Japan Society of Mechanical Engineers 1996;B62(598):2338.
- Zhao Y, Masuoka T, Tsuruta T. Prediction of transition boiling heat transfer based on partial dryout model of liquid layers. Transactions of the Japan Society of Mechanical Engineers 1996;B62(599):2717.

Condensation

- Akimoto H, Murao Y. Application of simplified condensation model to PWR LBLOCA transient analysis with TRAC-PF1 code. Journal of Nuclear Science and Technology 1996;33(4):290 (in English).
- Amano M. Effects of noncondensable gases on performance of a condenser in open-cycle OTEC systems. Bulletin of the Electrotechnical Laboratory 1996;60(6):25.
- Fujii T, Kataoka Y, Murase M. Evaporation and condensation heat transfer in a suppression chamber of the water wall type passive containment cooling system. Journal of Nuclear Science and Technology 1996;33(5):374 (in English).
- Fujikawa S, Kotani M, Takasugi N. Theory of film condensation on shock-tube endwall behind reflected shock wave (2nd report, theoretical basis for determination of condensation coefficient). Transactions of the Japan Society of Mechanical Engineers 1996;B62(596):1482.
- Hashimoto R, Yanagi K, Fujii T. Condensation of organic binary mixtures flowing downward inside a vertical tube. Transactions of the Japan Society of Mechanical Engineers 1996;B62(598):2363.
- Hashimoto R, Yanagi K, Fujii T. Condensation of organic binary mixtures flowing horizontally in horizontal tube bundle. Transactions of the Japan Society of Mechanical Engineers 1996;B62(597):1913.
- Ishihara I, Matsumoto R, Ebihara T. Gravity-controlled condensation heat transfer of carbon dioxide (relationship between condensation condition and heat transfer). Transactions of the Japan Society of Mechanical Engineers 1996;B62(595):1118.
- Maino K, Nozawa H, Nishimori Y, Kamiya T. Effect of condensation on shock wave propagation and reflection at

wedge surface in the low-temperature R-134a vapour. Thermal Science and Engineering 1996;4(3):35.

- Masuda W, Satoh M, Yamada H. Effects of water vapour condensation on the performance of supersonic flow chemical oxygen–iodine laser. JSME International Journal 1996;B39(2):273 (in English).
- Nozu S, Katayama H, Nakata H, Honda H. Condensation of refrigerant CFC 11 in horizontal microfin tubes (proposal of a correlation equation for frictional pressure gradient). Transactions of the Japan Society of Mechanical Engineers 1996;B62(601):3383.
- Takazawa H. Relation of exhaust and performance in condenser of open-cycle OTEC system. Bulletin of the Electrotechnical Laboratory 1996;60(6):13.
- Teranishi T, Makino T, Takimoto A, Hayashi Y. Prediction of condensation heat transfer of binary vapors of immiscible liquids on horizontal tube banks (condensation model). Transactions of the Japan Society of Mechanical Engineers 1996;B62(603):3912.
- Wu L, Hirahara H, Kawahashi M. Numerical simulation of compressible viscous two-phase flow with condensation (2nd report, analysis with semi-phenomenological droplet model and vibrational nonequilibrium condition). Transactions of the Japan Society of Mechanical Engineers 1996;B62(593):166.

Multiphase flow

- Aritomi M, Zhou S, Nakajima M, Takeda Y, Mori M, Yoshika Y. Measurement system of bubbly flow using ultrasonic velocity profile monitor and video data processing unit. Journal of Nuclear Science and Technology 1996;33(12):915 (in English).
- Asaka H, Kukita Y. Sub- to supercritical flow transition in a horizontally-stratified two-phase flow in PWR hot legs. Journal of Nuclear Science and Technology 1996;33(9):696 (in English).
- Fujii R, Nakazawa T, Asano H, Takenaka N, Yamada H. Characteristics of phase separation for gas-liquid two-phase flow using an impacting T-junction (results of ground experiments and application for microgravity). Transactions of the Japan Society of Mechanical Engineers 1996;B62(594):447.
- Fukuta M, Yanagisawa T, Shimizu T, Date H, Ogi Y. Flow characteristics of refrigerant–oil mixture through narrow clearance. Transactions of JAR 1996;13(2):175.
- Furukawa T, Fukano T. Effect of liquid viscosity on flow patterns in vertical upward gas-liquid two-phase flow. Transactions of the Japan Society of Mechanical Engineers 1996;B62(601):3257.
- Furukawa T, Fukano T. Prediction of the effect of liquid viscosity on interfacial shear stress and pressure drop in vertical upward gas–liquid annular flow. Transactions of the Japan Society of Mechanical Engineers 1996;B62(604):4032.
- Furuya M, Inada F, Yasuo A. Thermal–hydraulic instability of the natural circulation BWR, CRIEPI (Central Research Institute of Electric Power Industry), Report No.T95065, 1996, 1.
- Hayashi H, Sumida I, Sakai S, Wakai K. Measurement of void fraction distribution in two-phase flow by impedance CT

with neural network. Transactions of the Japan Society of Mechanical Engineers 1996;B62(593):130.

- Hibiki T, Mishima K. Visualization and measurements of twophase flows in metallic ducts using neutrons as microscopic probes (3rd report, quantitative measurement of neutron radiography image). Transactions of the Japan Society of Mechanical Engineers 1996;B62(595):919.
- Hibiki T, Mishima K. Visualization and measurements of twophase flows in metallic ducts using neutrons as microscopic probes (5th report, void distribution measurement method for two-phase flow in a round tube). Transactions of the Japan Society of Mechanical Engineers 1996;B62(600):3002.
- Hishida K, Hanzawa A, Sakakibara J, Sato Y, Maeda M. Turbulence structure of liquid–solid two-phase channel flow (1st report, measurements of two-phase flow by DPIV). Transactions of the Japan Society of Mechanical Engineers 1996;B62(593):18.
- Imanari M, Yanadori M, Hiramatsu M, Kasuga T. Friction factor reduction by addition of a surfactant in the transport of a water/particle slurry in a pipe. Transactions of the Japan Society of Mechanical Engineers 1996;B62(599):2812.
- Ishimoto J, Kamiyama S. Numerical analysis of bubble behavior in magnetic fluid under nonuniform magnetic field. Transactions of the Japan Society of Mechanical Engineers 1996;B62(603):3777.
- Ishimoto J, Okubo M, Kamiyama S. Study on stability of boiling two-phase flows of magnetic fluid. Transactions of the Japan Society of Mechanical Engineers 1996;B62(595):903.
- Ishimoto J, Okubo M, Nishiyama H, Kamiyama S. Basic study on an energy conversion system using gas–liquid two-phase flows of magnetic fluid (analysis on the mechanism of pressure rise). JSME International Journal 1996;B39(1):72 (in English).
- Kaji M, Iguchi M, Nakatani T, Okita K. Bubbling jet characteristics in an aeration tank. Transactions of the Japan Society of Mechanical Engineers 1996;B62(603):3798.
- Kariyasaki A, Fukano T, Ousaka A, Kagawa M. Isothermal airwater two-phase flow through a horizontal capillary return bend. Transactions of the Japan Society of Mechanical Engineers 1996;B62(593):115.
- Kawano S, Hashimoto H, Suyama T. Heat and fluid flow of two immiscible liquid layers in vertical cylindrical container (application to device for sequential production of solid spherical shells in liquid–liquid–gas systems). JSME International Journal 1996;B39(2):246 (in English).
- Kim SH. A modeling of the liquid–vapour flow in a self-heated porous medium; with application to the dryout limits. Journal of Nuclear Science and Technology 1996;33(9):686 (in English).
- Lee S, Inoue A, Takahashi M, Ueda H, Matsuzaki M, Hattori N. Flow patterns of air-water two-phase flow in vertical twisted-tape-inserted tubes. Transactions of the Japan Society of Mechanical Engineers 1996;B62(594):712.
- Li H, Tomita Y. Numerical simulation of swirling gas–solid flow in a vertical pipeline. Transactions of the Japan Society of Mechanical Engineers 1996;B62(603):3810.
- Lim IC, No HC. A disturbance wave instability model for annular-to-intermittent flow transition in vertical two-phase flow system. Journal of Nuclear Science and Technology 1996;33(12):903 (in English).
- Matsumoto Y, Kameda M. Propagation of shock waves in dilute

bubbly liquids (governing equations, Hugoniot relations, and effect of slippage between two phases). JSME International Journal 1996;B39(2):264 (in English).

- Minemura K, Egashira K, Ihara M, Furuta H, Yamamoto K. Simultaneous measurement method for volumetric flow rates of both phases of air-water mixture using a turbine flow meter. Transactions of the Japan Society of Mechanical Engineers 1996;B62(593):122.
- Minemura K, Wu J-C, Uchiyama T. Numerical prediction of developing turbulent bubbly flow in a rotating square-sectioned duct. Transactions of the Japan Society of Mechanical Engineers 1996;B62(603):3784.
- Mishima K, Hibiki T. Visualization and measurements of twophase flow in metallic ducts using neutrons as microscopic probes (2nd report, measurements of some flow characteristics by image processing techniques). Transactions of the Japan Society of Mechanical Engineers 1996;B62(593):137.
- Miyano H, Saito N, Ozaki O, Hoshida A. Vibration characteristics of fuel assemblies subjected to parallel two-phase flow (1st report, vibration characteristics for 2 × 2 tube bundle). Transactions of the Japan Society of Mechanical Engineers 1996;B62(595):896.
- Mizuno T, Arai T, Sugiyama H, Uchiyama T. Visualization study of boiling two-phase flows in a vertical circular tube (the case of small mass velocity and small heat flux). Transactions of the Japan Society of Mechanical Engineers 1996;B62(595):913.
- Mori K, Kaji M, Sakane M, Nakazatomi N, Shimizu H, Sekoguchi K. Study of wave venation in gas–liquid two-phase flow (2nd report, determination and analysis of main wavevein). Transactions of the Japan Society of Mechanical Engineers 1996;B62(598):2423.
- Mori K, Kaji M, Inoue K, Nakazatomi M, Shimizu H, Kondo Y, Sekoguchi K. Study on wave venation in gas–liquid twophase flow (3rd report, distinction between huge waves and disturbance waves and characteristics of huge waves). Transactions of the Japan Society of Mechanical Engineers 1996;B62(600):3149.
- Mori K, Kaji M, Sakane M, Nakazatomi N, Shimizu H, Sekoguchi K. Wave venation in downward gas–liquid two-phase flow (1st report, wave behavior on time-spatial map and analysis of main wave-vein). Transactions of the Japan Society of Mechanical Engineers 1996;B62(601):3459.
- Mori K, Kaji M, Kondo Y, Nakazatomi M, Shimizu H, Sekoguchi K. Wave venation in downward gas–liquid two-phase flow (2nd report, clustering analysis for huge wave and disturbance wave and characteristics of those waves). Transactions of the Japan Society of Mechanical Engineers 1996;B62(601):3467.
- Murai Y, Matsumoto Y. Numerical method for bubbly flows using the pressure equation. Transactions of the Japan Society of Mechanical Engineers 1996;B62(593):85.
- Murata K, Hijikata K. Optimization of two-phase flow evaporator by varying the channel cross section. Transactions of the Japan Society of Mechanical Engineers 1996;B62(601):3391.
- Nakagawa M, Matsumi T, Takeuchi H, Kokubo N. Mixing of the confined jet of mist flow. JSME International Journal 1996;B39(2):381 (in English).
- Nakazatomi M, Sekoguchi K. Effect of pressure on entrainment flow rate in vertical upwards gas-liquid annular two-phase

flow (1st report, experimental results for system pressures from 0.3 to 20 MPa). Transactions of the Japan Society of Mechanical Engineers 1996;B62(597):1869.

- Nakazatomi M, Sekoguchi K. Effect of pressure on entrainment flow rate in vertical upwards gas-liquid annular two-phase flow (2nd report, an assessment of published correlations of entrainment flow rate through high-pressure data and proposal of new correlations). Transactions of the Japan Society of Mechanical Engineers 1996;B62(597):1877.
- Ochi J, Ayukawa K, Kawahara G. Application of three-layer model analysis to single-component two-phase critical flow through a converging nozzle (comparison of the experimental results for stream-water mixture and carbon dioxide with the calculated results). JSME International Journal 1996;B39(1):80 (in English).
- Ochi M, Takei M. Minimum transport velocity of gas-solid twophase flow in a horizontal pipe. Transactions of the Japan Society of Mechanical Engineers 1996;B62(600):2978.
- Ohta J, Yamamoto F, Koketsu M. Bubble behavior in a horizontal narrow divergent passage (one dimensional approximate analysis). Transactions of the Japan Society of Mechanical Engineers 1996;B62(597):1884.
- Okuda K, Ikohagi T. Numerical simulation of collapsing behavior of bubble clouds. Transactions of the Japan Society of Mechanical Engineers 1996;B62(603):3792.
- Sato S, Katayama J, Takahashi H. Flooding in gas-liquid countercurrent two-phase flow in parallel vertical pipes. Transactions of the Japan Society of Mechanical Engineers 1996;B62(604):4026.
- Sato Y, Hishida K. Turbulence structure of liquid–solid twophase channel flow (2nd report, two-time-scale particle-laden turbulence model). Transactions of the Japan Society of Mechanical Engineers 1996;B62(593):26.
- Sekoguchi K, Mori K, Miwa M, Nakazatomi M, Shimizu H, Kaji M. Characteristics of interfacial profiles in upward and downward gas–liquid two-phase plug flow. Transactions of the Japan Society of Mechanical Engineers 1996;B62(601):3474.
- Serizawa A, Kataoka I. Review on numerical simulation of gasliquid two-phase dispersed flow (bubbly flow, droplet flow). Transactions of the Japan Society of Mechanical Engineers 1996;B62(603):3759.
- Sudo Y. Study of subcooling effect of injected water on falling water limitation in countercurrent two-phase flow in vertical channels. Transactions of the Japan Society of Mechanical Engineers 1996;B62(595):1157.
- Suzuki K, Torikai K, Hirata A, Usami S. Flooding of countercurrent two-phase flow of gas liquid (1st report, on flooding in vertical circular and annular channel). Transactions of the Japan Society of Mechanical Engineers 1996;B62(600):2972.
- Tomiyama A, Higaki H, Zun I, Sou A, Sakaguchi T. Numerical simulation of dispersed multiphase flow based on a particle tracking method (1st report, numerical method and application to laminar bubbly upflow in a duct). Transactions of the Japan Society of Mechanical Engineers 1996;B62(599):2558.
- Tomiyama A, Higaki H, Zun I, Sakaguchi T. Numerical simulation of dispersed multiphase flow based on a particle tracking method (2nd report, verification of the method for bubble-induced liquid velocity fields). Transactions of the Japan Society of Mechanical Engineers 1996;B62(599):2565.

- Tsuji Y. Numerical analysis of gas-solid flow regarded as a particulate complex system. Transactions of the Japan Society of Mechanical Engineers 1996;B62(603):3766.
- Uehiro M, Rao YF, Fukuda K. Linear stability analysis on instabilities of in-phase and out-of-phase modes in boiling water reactors. Journal of Nuclear Science and Technology 1996;33(8):628 (in English).
- Umekawa H, Ozawa M, Shiba Y, Mitsunaga T. Flow pattern and heat transfer of cryogenic two-phase flow in a rectangular channel. Technology Reports of Kansai University 1996;38:33.
- Wang J, Kurosaki Y, Satoh I. Heat transfer characteristics at high temperature of an impinging air jet laden with solid particles recirculating in an enclosure. Thermal Science and Engineering 1996;4(2):11.
- Wang J, Kurosaki Y, Satoh I. Heat transfer characteristics of an impinging air jet laden with solid particles recirculating in an enclosure (1st report, flow characteristics and volume fraction distribution of gas-solid suspension). Transactions of the Japan Society of Mechanical Engineers 1996;B62(596):1502.
- Wang J, Kurosaki Y, Satoh I. Heat transfer characteristics of an impinging air jet laden with solid particles recirculating in an enclosure (2nd report, heat transfer characteristics and heat transfer enhancement). Transactions of the Japan Society of Mechanical Engineers 1996;B62(596):1511.
- Watanabe M, Katsuta M, Nagata K, Sakakura S, Iijima H. Two-phase refrigerant flow distribution in a multipass evaporator with vertical upward main tube, 1st report: equal heating load on each pass. Transactions of JAR 1996;13(3):277.
- Watanabe M, Katsuta M, Nagata K, Sakakura S, Iijima H. Two-phase refrigerant flow distribution in a multipass evaporator with vertical upward main tube, 2nd report: unequal heating load on each pass. Transactions of JAR 1996;13(3):285.
- Watanabe K, Kui H. Drag of a sphere in high-Reynolds-number range in water/fine solid particle suspension. Transactions of the Japan Society of Mechanical Engineers 1996;B62(603):3832.
- Watanabe K, Sugimura Y, Yaita K. Computation of trajectories of a single spherical particle in rotating flows (evaluation of lift force acting on the spherical particle). Transactions of the Japan Society of Mechanical Engineers 1996;B62(603):3804.
- Watanabe K, Zhang Y, Fujita T. Drag reduction in flow past a circular cylinder in water/fine solid particle suspension. Transactions of the Japan Society of Mechanical Engineers 1996;B62(603):3818.
- Yokoi Y, Kamemoto K, Matsumoto H. Numerical simulation of flow around a circular cylinder in a solid–liquid twophase flow using a vortex method. Transactions of the Japan Society of Mechanical Engineers 1996;B62(603):3824.

Melting and solidification

- Aoki Y, Nishimura T, Takei M. The curing process analysis for epoxy resin casting (analysis of temperature and viscosity in nonisothermal process). Transactions of the Japan Society of Mechanical Engineers 1996;B62(593):312.
- Chirifu S, Honma T, Aoki H, Miura T. Heterogeneous

nucleation of supercooled water by foreign particles. Transactions of JAR 1996;13(1):49.

- Chirifu S, Honma T, Nishimura M, Aoki H, Miura T. Study on ice dendrite growth. Transactions of JAR. 1996;13(3):247.
- Hirasawa Y, Takegoshi E, Konya H, Tajima I. A study on solidification and melting of water around spine-fin tube. Transactions of JAR 1996;13(3):315.
- Hirata T, Ishikawa M, Kitagawa I. Ice formation on longitudinally finned cold flat plate in water-flow channel. Transactions of the Japan Society of Mechanical Engineers 1996;B62(595):1178.
- Inaba H, Horibe A, Ozaki K, Yokota M. Ice nucleation phenomenon of supercooled water with ice nucleating substances under various conditions. Transactions of JAR 1996;13(3):293.
- Inatomi Y, Gao L, Honda T, Yamashita H. Freezing of supercooled water using magnetic fluid. Transactions of the Japan Society of Mechanical Engineers 1996;B62(603):3964.
- Kang C, Okawa S, Saito A. Simulation on melting process of ferromagnetic and antiferromagnetic ice under atmospheric pressure. Transactions of JAR 1996;13(3):267.
- Kusumoto H, Shizuya M, Itoo M. Effect of air velocity, surface temperature, and absolute humidity on frosting phenomena under condition of electric field. Transactions of JAR 1996;13(3):259.
- Momose N, Tada Y, Hayashi Y. Numerical simulation of thawing process of biological tissue. Transactions of JAR 1996;13(3):331.
- Nakada M, Nishioka S, Osako T, Mori K, Sato T, Okimoto S. Control of initial solidification of steel by application of high frequency magnetic field. Tetsu to Hagane (Journal of Iron Steel Institute of Japan). 1996;82(12):1005.
- Nakano M, Inazumi T, Kasama S, Kaneda H, Sadaoka H, Takayasu H. Computer simulation of pore formation in iron-ore sintercake. Tetsu to Hagane (Journal of Iron Steel Institute of Japan). 1996;82(2):111.
- Ogawa Y. Studies on rupture of fish body during freezing inside pressure and stress at frozen part of fish body during freezing—. Transactions of JAR 1996;13(1):37.
- Saito A, Kumano H, Okawa S, Yamashita K. Analytical study on transient direct contact melting phenomena. Transactions of JAR 1996;13(1):97.
- Saito A, Kumano H, Okawa S, Ohta S. Numerical analysis on the effects of initial temperature of the PCM in transient direct contact melting. Transactions of JAR 1996;13(3):341.
- Sasao H, Yoshida T. Bench scale test of absorption slurry-ice maker. Transactions of JAR 1996;13(3):239.
- Sugawara M, Fujita T. Melting of an ice layer with double effect of temperature and concentration (1st report, for the case of the same initial temperature of a vertical ice plate and a liquid). Transactions of the Japan Society of Mechanical Engineers 1996;B62(599):2774.
- Tada Y, Momose N, Jiang R, Hayashi Y. Micro-behavior and injury of biological cell during thawing process. Transactions of JAR 1996;13(3):321.
- Tatsukoshi K, Kurosaki Y, Satoh I, Satoh Y. Effects of thermal conditions on sink-mark generation of press-formed glass. Transactions of the Japan Society of Mechanical Engineers 1996;B62(596):1563.
- Tatsukoshi K, Kurosakai Y, Satoh I, Satoh Y. Effects of thermal conditions on sink-mark generation of press-formed glass

(measurement of temperature of glass and generation process of sink-mark). Transactions of the Japan Society of Mechanical Engineers 1996;B62(600):3165.

- Tsuruta T, Kawamizu T, Nonaka I, Masuoka T. Experimental study on freezing of onion skin cells (intracellular ice formation and dehydration with extracellular solution). Transactions of the Japan Society of Mechanical Engineers 1996;B62(598):2446.
- Ujihira M, Aoki K, Yamaguchi R, Tanishita K. Viability evaluation using the effective thermal conductivity during extracellular freezing in killifish embryos. Transactions of the Japan Society of Mechanical Engineers 1996;B62(598):2414.

Porous media (including fluidized and packed beds)

- Aihara T, Ohara T, Shimoyama T, Kitano H. Heat transfer and defrosting characteristics of a horizontal, cooled tube array immersed in a very shallow fluidized bed. Transactions of the Japan Society of Mechanical Engineers 1996;B62(598):2406.
- Akiyama T, Niu M, Takahashi R, Yagi J. Frequency characteristics of induction melting furnace with coke packed-beds. Thermal Science and Engineering 1996;4(4):1.
- Anabtawi MZ, Ibrahim GA. Gas holdup and volumetric liquidphase mass transfer coefficient in a spout-fluid bed. Journal of Chemical Engineering Japan 1995;29(1):20 (in English).
- Cho YJ, Namkung W, Kim SD, Park S, Kim P-T. Effect of secondary air injection on bed-to-wall heat transfer in a circulating fluidized bed. Journal of Chemical Engineering Japan 1995;29(1):44 (in English).
- Deguchi S, Matsuda H, Hasatani M, Hirschberg B, Werther J. Spray pyrolysis in a circulating fluidized bed. Journal of Chemical Engineering Japan 1995;29(1):25 (in English).
- Fujii Y, Tsuyuki K, Hijikata K. Drying and wetting processes in porous media with a macropore and capillary model. Transactions of the Japan Society of Mechanical Engineers 1996;B62(596):1475.
- Fujima Y, Tagashira K, Takatsuka H, Arakawa Y, Hasegawa T. Mechanism of fast fluidization and vertical profile of solid concentration in fast fluidized beds (regime of fast fluidization). JSME International Journal 1996;B39(2):387 (in English).
- Inoue M, Nakayama A. Non-Newtonian fluid flow and heat transfer in a porous medium (1st report, two-dimensional numerical modeling of fluid flow). Transactions of the Japan Society of Mechanical Engineers 1996;B62(595):1124.
- Inoue M, Nakayama A. Non-Newtonian fluid flow and heat transfer in a porous medium (2nd report, prediction of porous inertia based on a three-dimensional numerical model). Transactions of the Japan Society of Mechanical Engineers 1996;B62(601):3426.
- Kamiuto K, Saitoh S. Fully developed forced-convection heat transfer in cylindrical packed beds with constant wall heat fluxes. JSME International Journal 1996;B39(2):395 (in English).
- Kawai H, Okagaki O, Fukusako S. Experimental study of heat and mass transfer characteristics for a porous layer with ventilation. Transactions of JAR 1996;13(3):229.
- Krylov A, Sorek S, Levy A, Ben-Dor G. Simple waves in saturated porous media (I. the isothermal case), JSME International Journal 1996;B39(2):294 (in English).

- Kuwahara F, Nakayama A, Koyama H. A study on thermal dispersion in fluid flow and heat transfer in porous media (numerical prediction of thermal dispersion using a twodimensional structural model). Transactions of the Japan Society of Mechanical Engineers 1996;B62(600):3118.
- Kuwahara F, Nakayama A, Koyama H. Direct numerical simulation of fluid flow in an anisotropic porous medium. Transactions of the Japan Society of Mechanical Engineers 1996;B62(603):3920.
- Miyamoto M, Jin R, Katoh Y, Kurima J. An experimental study on particle behavior and heat transfer characteristics around horizontal tube bundle in fluidized beds. Transactions of the Japan Society of Mechanical Engineers 1996;B62(601):3431.
- Miyata Y, Akagawa S. An experimental study of static solid– liquid phase equilibrium in the pores of a porous medium. Transactions of the Japan Society of Mechanical Engineers 1996;B62(600):3157.
- Nishioka K, Murayama T, Ono Y. Analysis of heat transfer in porous solid using image data characterization. Tetsu to Hagane (Journal of Iron Steel Institute of Japan) 1996;82(6):475.
- Nishizawa M, Morito T, Matsuura M, Aoki H, Miura T. Analysis of steam flow behavior in packed bed of coal particles. Kagaku Kogaku Ronbunshu (Transactions of Chemical Engineering Japan) 1996;22(4):898.
- Ozaki K, Inaba H. Numerical analysis model of forced convection heat transfer of a layer of spherical particles considering boundary wall effect. Transactions of the Japan Society of Mechanical Engineers 1996;B62(603):3926.
- Oshita T, Nagato S, Miyoshi N, Hosoda S. Study of immersed heat exchange surface for high efficiency heat recovery from wire rim tires in a fluidized bed boiler, Kagaku Kogaku Ronbunshu (Transactions of Chemical Engineering Japan) 1996;22(4):707.
- Ozaki K, Inaba H. Convection heat transfer of horizontalspherical particle layer heated from below and cooled from above (2nd report, effect of thickness of particle layer). Transactions of the Japan Society of Mechanical Engineers 1996;B62(596):1488.
- Ozawa M, Umekawa H, Matsuda T, Takenaka N, Matsubayashi M, Tsuruno A. Large particle movement and drag coefficient in a fluidized bed. Transactions of the Japan Society of Mechanical Engineers 1996;B62(601):3413.
- Sorek S, Krylov A, Levy A, Ben-Dor G. Simple waves in saturated porous media (II. the non isothermal case). JSME International Journal 1996;B39(2):299 (in English).
- Yamada J, Kurosaski Y, Morikawa T. Radiation emitted from fluidizing particles adjacent to a heated surface in a fluidized bed,. Transactions of the Japan Society of Mechanical Engineers 1996;B62(593):234.

Mass transfer

- Ihara A, Watanabe H, Hashimoto H, Kawano S, Katagiri K. Flow test through semipermeable membranes with salinity difference between pure water and sea water for foundation of hydraulic power plant. Transactions of the Japan Society of Mechanical Engineers 1996;B62(596):1454.
- Iijima A, Sasajima Y, Ichimura M, Ozawa S. Computer simu-

lation of surfactant-mediated growth. Journal of the Faculty of Engineering Ibaraki University 1996;44:13.

- Kitamura A, Yamamoto T, Moriyama H, Nishikawa S. Analysis of adsorption behavior of cesium onto quartz using electrical double layer model. Journal of Nuclear Science and Technology 1996;33(11):840 (in English).
- Kiyota M, Morioka I, Ousaka A, Fujikawa K. Steam absorption into films of aqueous solution of LiBr flowing over multiple horizontal pipes. Transactions of the Japan Society of Mechanical Engineers 1996;B62(598):2344.
- Kobayashi N, Shibata A, Yamamoto I. Numerical solution of argon 36-38-40 concentration profiles within thermal diffusion column. Journal of Nuclear Science and Technology 1996;33(10):781 (in English).
- Mimura H, Akiba K, Yamamoto N. Adsorption properties of europium on granulated α-zirconium phosphate. Journal of Nuclear Science and Technology 1996;33(7):592 (in English).
- Miyahara S, Sagawa N, Shimoyama K. Iodine mass transfer from xenon–iodine mixed gas bubble to liquid sodium pool, (I); experiment. Journal of Nuclear Science and Technology 1996;33(2):128 (in English).
- Miyahara S, Sagawa N. Iodine mass transfer from xenon-iodine mixed gas bubble to liquid sodium pool, (II); development of analytical model. Journal of Nuclear Science and Technology 1996;33(3):220 (in English).
- Moriya Y, Ishii N. Humidity control system with adsorption materials. JSME International Journal 1996;B39(3):653 (in English).
- Sakai Y, Miwa M, Nakamura I. Diffusion of matter in the wall turbulent flow (3rd report, conditional statistics of the concentration fluctuation of a wall point source plume in a pipe flow). Transactions of the Japan Society of Mechanical Engineers 1996;B62(602):3541.
- Sasahira A, Hosikawa T, Kamoshida M, Kawamura F. Transfer of ruthenium from a simulated reprocessing solution to gas phase during a continuous distillation. Journal of Nuclear Science and Technology 1996;33(10):753 (in English).
- Tanaka T, Ohnuki T. Colloidal migration behavior of radionuclids absorbed on mobile fine soil particles through a sand layer. (Journal of Nuclear Science and Technology 1996;33(1):62 (in English).
- Yokozuka T, Funasako T, Shimada H, Shizawa K, Takahashi K. Diffusion equations based on generalized continuum mechanics and numerical analysis. Transactions of the Japan Society of Mechanical Engineers 1996;B62(597):1977.

Thermal radiation

- Hido EM, Nishimura M. Theoretical analysis of collection characteristics of a solar air heater with a built-in net. Journal of Chemical Engineering Japan 1995;29(2):282 (in English).
- Kudo K, Kuroda A, Eid A, Saito T, Oguma M. Solution of the inverse radiative load problem using the singular value decomposition technique. JSME International Journal 1996;B39(4):808 (in English).
- Kudo K, Kuroda A, Saito T, Oguma M. Application of a method for solving inverse radiative load problems to design of furnace. Transactions of the Japan Society of Mechanical Engineers 1996;B62(600):3131.
- Li B, Kudo K, Kuroda A. Analysis model of radiative heat

transfer through fibrous layer. Transactions of the Japan Society of Mechanical Engineers 1996;B62(594):748.

- Li B, Kudo K, Kuroda A. Numerical analysis of radiative energy transmission through a fibrous layer and its experimental verification (large-size-parameter case). Transactions of the Japan Society of Mechanical Engineers 1996;B62(599):2840.
- Maruyama S, Aihara T. Radiation heat transfer of arbitrary 3-D participating media and surfaces using radiation element method by ray emission model (REM²). Transactions of the Japan Society of Mechanical Engineers 1996;B62(595):1091.
- Miyanaga T, Ohnuma T. Development of analytical method for thermal radiant environment in a 3 dimensional space, (part 3) new method for judging obstructions and its experimental verification, CRIEPI (Central Research Institute of Electric Power Industry) Report No.T95076, 1 (1995).
- Nakamura Y, Kushida G, Yamashita H, Takeno T. Effects of natural convection on self-ignition of solid fuel heated by external radiation. Transactions of the Japan Society of Mechanical Engineers 1996;B62(599):2758.
- Nishizawa K. Feedback effects of stratiform clouds on climate change (estimation with a one-dimensional solar/infrared radiation balance model), CRIEPI (Central Research Institute of Electric Power Industry) Report No.T95062, 1995; 1.
- Ohwada Y. Influence of deviation from Lambertian reflectance on the effective emissivity of a cavity. Bulletin of NRLM (Natural Research Laboratory of Metrology) 1996;45(4):353.

Molecular and microscale heat transfer

- Hayashi Y, Kunimine K, Takamori A, Yoshida M. Microheat transfer of solidification of mixtures with supercooling (experiment with two-dimensional solidification). Transactions of the Japan Society of Mechanical Engineers 1996;B62(596):1517.
- Ichimura H, Iwaki T. Molecular dynamics study on thermal expansion of solid. Thermal Science and Engineering 1996;4(3):9.
- Inoue T. Thin film deposition using a velocity-selected vacuum deposition method (development of velocity selector and its application to vacuum deposition). Transactions of the Japan Society of Mechanical Engineers 1996;B62(599):2711.
- Ishimaru K, Okazaki K. Quantum analysis in the transition process to excited state of an oxygen molecule induced by electron collisions. Transactions of the Japan Society of Mechanical Engineers 1996;B62(598):2350.
- Matsui J, Matsumoto Y. Numerical analysis of gas–surface interaction by molecular dynamics method (3rd report, analysis on transferred energy and velocity distribution after collision). Transactions of the Japan Society of Mechanical Engineers 1996;B62:2156.
- Matsumoto Y, Tokumasu Y. Construction of collision model of diatomic molecules (1st report, the MD simulation of molecular collision). Transactions of the Japan Society of Mechanical Engineers 1996;B62(595):864.
- Matsumoto Y, Yamanishi N. Molecular dynamics study of gassurface interaction (1st report, numerical simulation of O₂/graphite). Transactions of the Japan Society of Mechanical Engineers 1996;B62(595):880.
- Saito Y, Hirasawa S, Saito T. Profile simulation of sputter-

deposited Al film by molecular dynamics. Transactions of the Japan Society of Mechanical Engineers 1996;B62(603):3971.

- Nakabeppu O, Hijikata K, Chandrachood M, Lai J, Majumdar A. Microscale temperature measurement using an atomic force microscope. Transactions of the Japan Society of Mechanical Engineers 1996;B62(593):284.
- Sugiyama T, Echigo R, Yoshida H. Cluster formation around the critical point in two-dimensional Lennard–Jones particle system. Thermal Science and Engineering 1996;4(2):29.
- Tokumasu T, Matsumoto Y. Construction of collisions model of diatomic molecules (2nd report, construction of the model and its verification). Transactions of the Japan Society of Mechanical Engineers 1996;B62(595):872.
- Yazaki T, Okawa S, Saito A. Research on thermophysical properties of water under atmospheric pressure using molecular dynamics method. Transactions of JAR 1996;13(1):109.
- Yoshida T, Uematsu M. Prediction of PVT properties of natural gases by molecular simulation. Transactions of the Japan Society of Mechanical Engineers 1996;B62(593):278.

Measurement

- Hijikata K, Uchida S, Ogawa K. Visualization of free surface phenomena using photochromic dye. Transactions of the Japan Society of Mechanical Engineers 1996;B62(593):291.
- Ikegami M, Shioji M, Kawanabe H, Yamaguchi T. Gas-flow measurements in a jet using cross correlation of particle images. Transactions of the Japan Society of Mechanical Engineers 1996;B62(593):297.
- Lee C-W, Baba T, Ono A. Development of a differential laser flash calorimeter. Bulletin of NRLM (Natural Research Laboratory of Metrology) 1996;45(2):196.
- Nakabeppu O, Yamamoto N, Kinosita A, Hijikata K. Measurement of temperature and thermal properties of fluid by detecting 1ω and 3ω components (1st report, experimental study). Transactions of the Japan Society of Mechanical Engineers 1996;B62(599):2767.
- Sato S, Kumakura T. Interferometric tomography measurement of spatial temperature profiles in premixed flame (application of dual plate Fourier transform interferometry). Transactions of the Japan Society of Mechanical Engineers 1996;B62(604):4241.
- Tagawa M, Okuda M, Ohtay. Two-wire thermocouple for fluctuating temperature measurements in combustion (rational reconstruction of mean and fluctuating time constants). Transactions of the Japan Society of Mechanical Engineers 1996;B62(598):2506.
- Tsutsui T, Akiyama M, Sugiyama H, Takato K. Experimental analysis of 2D-unsteady temperature field by using Mach– Zehnder interferogram image. Transactions of the Japan Society of Mechanical Engineers 1996;B62(595):1129.
- Watanabe H. Chappuis' experiments and the "Echelle Normale". Bulletin of NRLM (Natural Research Laboratory of Metrology) 1996;45(2):283.

Thermophysical properties

Asada H, Yamashita H. Absorption spectrum of CsI:Pb²⁺ crystal. Journal of the Physical Society of Japan 1996;65(2):649 (in English).

- Ayama M, Kubo T, Korei Y. Thermal conductivity measurements on $UO_{2+\chi}$ from 300 to 1,400K. Journal of Nuclear Science and Technology 1996;33(8):636 (in English).
- Biwa T, Mizutani U. Evaluation of low-temperature specific heats and thermal conductivities of Er–Ag alloys as regenerator materials. Cryogenetic Engineering 1996;31(4):190.
- Dasgupta G, Ghosh N, Nande N, Chatterjee AK, Acharyya S. Estimation of column calibration factor and force parameters to predict temperature dependence of thermal diffusion factor of some simple molecules. Journal of the Physical Society of Japan 1996;65(8):2506 (in English).
- Furuta H, Yamamoto I. Diffusion coefficients in 4-component mixture expressed explicitly in terms of binary diffusion coefficients and mole fractions. Journal of Nuclear Science and Technology 1996;33(8):650 (in English).
- Hosoya Y, Terai T, Tanaka S, Takahashi Y. Phase diagram of NdCl₃-NaCl binary system. Japan Journal of Thermophysical Properties (Netsu Bussei) 1996;10(4):96.
- Ikebe M, Matsukawa M, Fujishiro H, Yoshimoto N, Yoshizawa M, Noto K. Thermal conductivity in the ab-plane of the organic conductor α-(BEDT-TTF)₂I₃. Journal of the Physical Society of Japan 1996;65(2):651 (in English).
- Inaba H, Haruki N. Viscosity evaluation of water solutions with surfactant as a medium for transporting heat energy. Japan Journal of Thermophysical Properties (Netsu Bussei) 1996;10(2/3):48.
- Ishigaki A, Moriya T. Anomalous specific heat around ferromagnetic instability in metals. Journal of the Physical Society of Japan 1996;65(2):376 (in English).
- Ishii F, Hino M, Itoh H. Thermodynamics of Ni-Ca-O and Ni-Ta-Ca-O melts in equilibrium with solid CaO. Tetsu to Hagane (Journal of Iron Steel Institute of Japan) 1996;82(6):465.
- Ishimoto S, Hirai M, Ito K, Korei Y. Thermal conductivity of UO₂–BeO pellet. Journal of Nuclear Science and Technology 1996;33(2):134 (in English).
- Ito T, Yamaguchi T, Akasaka R. Heat of vaporization of mixtures. Transactions of the Japan Society of Mechanical Engineers 1996;B62(594):700.
- Izawa K, Suzuki T, Kitamura M, Fujita T, Takabatake T, Nakamoto G, Fujii H, Maezawa K. The origin of magnetic field dependence of specific heat in single-crystalline CeNiSn. Journal of the Physical Society of Japan 1996;65(10):3119 (in English).
- Fujioka H, Murakami T, Tanishita K. Measurement of axial effective diffusivity in oscillatory pipe flow by Laplace transform method. Transactions of the Japan Society of Mechanical Engineers 1996;B62(603):3860.
- Kanari K, Saito Y, Harada K, Yamanaka S. A study on thermophysical properties of materials for Li-ion batteries. Japan Journal of Thermophysical Properties (Netsu Bussei) 1996;10(2/3):59.
- Kanayama K, Baba H, Endoh N, Nemoto T. Spectral transmittance of water and sodium chloride–water solution as working substance for solar pond. Transactions of the Japan Society of Mechanical Engineers 1996;B62(601):3399.
- Kodama D, Kubota N, Yamaki Y, Tanaka H, Kato M. High pressure vapour–liquid equilibria and density behaviors for carbon dioxide + methanol system at 313.15K. Japan Journal of Thermophysical Properties (Netsu Bussei) 1996;10(1):16.
- Lee C, Miyata H. Inverse problem analysis for evaluation of

surface tension of liquid. Transactions of the Japan Society of Mechanical Engineers 1996;B62(598):2283.

- Li J, Sato H, Watanabe K. Modified Peng-Robinson equation of state for pure and mixture refrigerants with R-32, R-125 and R-134a. Transactions of JAR 1996;13(3):303.
- Matsushima E, Hojo K, Sawa K, Nagashima A. Thermal diffusivity and porosity of solid materials by the electromagnetic ultrasonic technique (3rd report, simultaneous measurement of ultrasonic velocity and thermal diffusivity. Transactions of the Japan Society of Mechanical Engineers 1996;B62(597):1970.
- Nemoto E, Kawashimo K. Principal thermal conductivity and rotating angle measurement of two-dimensional anisotropic heat conductor using an unsteady point source of heat. Transactions of the Japan Society of Mechanical Engineers 1996;B62(603):3905.
- Nishikawa T, Yasui Y, Kobayashi Y, Sato M. Thermal properties of two dimensional Mott system $La_{1.17-\chi}Sr_{\chi}VS_{3.17}$. Journal of the Physical Society of Japan 1996;65(8):2543 (in English).
- Ohnishi A, Hatada T, Hayashi T. Simultaneous measurement of solar absorptance and total hemispherical emittance. Japan Journal of Thermophysical Properties (Netsu Bussei) 1996;10(1):10.
- Ohta H, Tomota Y, Kawasaki A, Watanabe R, Waseda Y. Thermal conductivities of SUS304/PSZ composite materials. Tetsu to Hagane (Journal of Iron Steel Institute of Japan) 1996;82(9):789.
- Ohta H, Akiyama T, Hatori K, Yagi J, Waseda Y. Thermal diffusivity measurements of $Fe_{1-\chi}O$ by the devised laser-flash method for small samples. Tetsu to Hagane (Journal of Iron Steel Institute of Japan 1996:82(9):795.
- Ono A, Juhng W-N, Matsumoto T, Baba T, Kishi M, Yamamoto M. Thermal conductivity measurement by steady state method of metallic thin films deposited on glass substrates. Bulletin of NRLM (National Research Laboratory of Metrology) 1996;45(4):327.
- Saito A, Okawa S, Shimamoto D. Research on a thermal conductivity measurement of supercooled water. Transactions of the Japan Society of Mechanical Engineers 1996;B62(594):770.
- Sakoguchi A, Ueoka R, Kato Y, Arai Y. Correlation of vapour pressures of coal-derived compounds. Japan Journal of Thermophysical Properties (Netsu Bussei) 1996;10(1):27.
- Sato H, Yui M, Yoshikawa H. Ionic diffusion coefficients of Cs⁺, Pb²⁺, Sm³⁺, Ni²⁺, SeO₄⁻ and TcO₄⁻ in free water determined from conductivity measurements. Journal of Nuclear Science and Technology 1996;33(12):956 (in English).
- Shibata H, Emi T, Waseda Y, Kondo K, Ohta H, Nakajima K. Thermal diffusivities of continuous casting mold fluxes for steel in the glassy and crystalline states. Tetsu to Hagane (Journal of Iron Steel Institute of Japan) 1996;82(6):504.
- Shina R. Specific heat of a doped Kondo semiconductor $(Ce_{1-\chi}La_{\chi})_3Bi_4Pt_3$. Journal of the Physical Society of Japan 1996;65(4):1131 (in English).
- Takegoshi E, Hirasawa Y, Hoyo S. Thermal constants of Al₂O– SiC–ZrO₂–TIC composites. Japan Journal of Thermophysical Properties (Netsu Bussei) 1996;10(1):21.
- Yamada S, Takano T, Kobayashi K. Effective thermal conductivity measurement of bread under processing and stor-

age. Japan Journal of Thermophysical Properties (Netsu Bussei) 1996;10(2/3):54.

- Zhu H, Sato Y, Yamamura T. Ultrasonic absorption coefficient in NaNO₃–MNO₃ (M: Li, K, Rb, Cs) binary melts. Japan Journal of Thermophysical Properties (Netsu Bussei) 1996;10(4):109.
- Zhu H, Shibata Y, Sato Y, Yamamura T. Density and ultrasonic velocity of NaNO₃-MNO₃ (M: Li, K, Rb, Cs) binary melts. Japan Journal of Thermophysical Properties (Netsu Bussei) 1996;10(4):102.

Heat exchanger

- Endoh K, Matsushima H, Nonaka M. Characteristics of a refrigeration cycle using a zeotropic refrigerant mixture with a temperature glide shift heat exchanger. Transactions of JAR 1996;13(2):207.
- Hamaguchi K, Nogawa M, Momose Y. Improvement of semifree piston Stirling engine regenerator performance by combined mesh matrices. Transactions of the Japan Society of Mechanical Engineers 1996;B62(595):1247.
- Hanaue Y, Ishiyama K, Kimura E, Takeshita T, Nagao M, Inaguchi T, Naka K. Development of rare earth–ruthenium intermetallic compounds for use as regenerator materials. Cryogenic Engineering 1996;31(4):156.
- Hijikata K, Suzuki Y, Igeta M, Tsukuda K, Okazaki K. Experimental study on high-efficiency heat-regenerating burner. Transactions of the Japan Society of Mechanical Engineers 1996;B62(599):2834.
- Isogami H, Saho N, Takizawa T, Yoshida C, Yokoi K. Heat transfer performance of heat exchanger with a stackedsphere matrix formed by diffusion bonding. Transactions of the Japan Society of Mechanical Engineers 1996;B62(598):2400.
- Isshiki S, Sakano A, Ushiyama I, Isshiki N. Studies on flow resistance and heat transfer of regenerator wire meshes of Stirling engine in oscillatory flow. Transactions of the Japan Society of Mechanical Engineers 1996;B62(604):4254.
- Matsumoto R, Kikkawa S, Senda M. Effect of pin-fin arrangement on endwall heat transfer. Transactions of the Japan Society of Mechanical Engineers 1996;B62(597):1953.
- Mizuno M, Morioka M, Hori M, Kudo K. Heat transfer and flow characteristics of offset fins in low-Reynolds-number region (effects of parameters on heat transfer and flow characteristics). Transactions of the Japan Society of Mechanical Engineers 1996;B62(597):1921.
- Takamatsu T, Nakaiwa M, Nakanishi T. The concept of an ideal heat integrated distillation column (HIDiC) and its fundamental properties. Kagaku Kogaku Ronbunshu (Transactions of Chemical Engineering Japan) 1996;22(5)985.
- Tsukagoshi T, Matsumoto K, Hashimoto T, Kuriyama T, Nakagome H. Optimum structure of multilayer regenerator with magnetic materials. Cryogenic Engineering 1996;31(4):168.
- Yabuki M, Eda T, Hashimoto T, Kuriyama T, Takahashi M, Nakagome H. Stored heat in regenerator and regenerator efficiency of Gifford–McMahon refrigerator using magnetic regenerator materials. Cryogenic Engineering 1996;31(4):209.
- Ueoka S, Yoshikawa K, Raveevonganothai S, Shioda S, Ikeda

S, Tezuka M, Yamamura K, Ban H, Natani S, Hickel SD, Hanus GJ. Thermal performance of a 2000°C class coredbrick bed high-temperature heat exchanger. Transactions of the Japan Society of Mechanical Engineers 1996;B62(604):4248.

Heat pipe and thermosyphon

- Monde M, Mihara S, Mitsutake Y. Experimental study of critical heat flux of open two-phase thermosyphon. Transactions of the Japan Society of Mechanical Engineers 1996;B62(594):729.
- Monde M, Mitsutake Y, Kurihara A, Mihara S. Analytical study of critical heat flux in two phase thermosyphon (relationship between maximum falling liquid rate and critical heat flux). JSME International Journal 1996;B39(4):768 (in English).
- Ochi T, Ogushi T, Aoki R. Development of a heat-pipe thermal diode and its heat transport performance. JSME International Journal 1996;B39(2):419 (in English).
- Suzuki O, Fujikoka K, Kuwahara H, Takasaki T. Simulation of the transient temperature distribution in a cooling apparatus for high-power semiconductor devices using heat pipe. Transactions of the Japan Society of Mechanical Engineers 1996;B62(595):1172.
- Suzuki O, Kuwahara H, Fujioka K, Isaki K, Saitoh S. Start-up behavior from the frozen state of a water heat pipe with aircooled fins. Transactions of the Japan Society of Mechanical Engineers 1996;B62(598):2438.

Thermal storage

- Hasegawa S, Fukui K, Hirota S. Continuous formation of liquid ice in the vertical pipe using water-immiscible coolant. Kagaku Kogaku Ronbunshu (Transactions of Chemical Engineering Japan) 1996;22(5):1201.
- Inaba H, Sato K. Fundamental study on latent cold heat storage by means of oil droplets with low freezing point (2nd report, nondimensional analysis of solidification and heat transfer characteristics of tetradcane oil droplets ascending in lowtemperature water solution. Transactions of the Japan Society of Mechanical Engineers 1996;B62(593):325.
- Inaba H, Sato K. Fundamental study on latent cold heat storage by means of oil droplets with low freezing point (3rd report, cold heat energy release characteristics of direct-contact heat exchange between solidified oil droplets and hot air). Transactions of the Japan Society of Mechanical Engineers 1996;B62(602):3704.
- Inaba H, Tu P. Transient heat characteristics of a rectangular storage vessel packed with shape-stabilized phase change material (heat storage process). Transactions of the Japan Society of Mechanical Engineers 1996;B62(596):1576.
- Inaba H, Tu P. Transient heat characteristics of a rectangular heat storage vessel packed with shape-stabilized phase change material (effect of various factors on heat release process). Transactions of the Japan Society of Mechanical Engineers 1996;B62(599):2790.
- Ishikawa M, Hirata T, Tamaki H. Performance estimation simu-

lation of capsule-type thermal energy storage system (in-line arranged cylindrical capsules). Transactions of the Japan Society of Mechanical Engineers 1996;B62(597):2005.

- Kanamori M, Matsuda H, Hasatani M. Heat storing/releasing characteristics of the chemical heat storing unit of electricity using Ca(OH)₂/CaO reaction. Kagaku Kogaku Ronbunshu (Transactions of Chemical Engineering Japan) 1996;22(2):257.
- Kyaw K, Matsuda H, Hasatani M. Applicability of carbonation/decarbonation reactions to high-temperature thermal energy storage and temperature ungrading. Journal of Chemical Engineering Japan 1995;29(1):119 (in English).
- Miyanaga T, Ohnuma T, Nakano Y, Matsuki N, Oka T. Development of ice storage radiant cooling system (part 1) influence of radiation and humidity on thermal comfort, CRIEPI (Central Research Institute of Electric Power Industry) Report No.T95075, 1996, 1.
- Miyatake O, Morita H, Shibata K. Heat transfer in fixed beds packed with cross-linked plastic particles subjected to melt– freeze cycles. Kagaku Kogaku Ronbunshu (Transactions of Chemical Engineering Japan) 1996;22(3):662.
- Miyatake O, Morita H, Uryu K, Yonemori T. Discharge characteristics of latent heat storage columns packed with crosslinked plastic particles. Kagaku Kogaku Ronbunshu (Transactions of Chemical Engineering Japan) 1996;22(4):735.
- Saito A, Okawa S, Shintani T, Iwamoto R. On the heat transfer characteristics of the thermal energy storage capsule in the heat removal process, using an inorganic hydrate (1st report, basic discussion on the heat transfer characteristics of the material and proposal of and analytical model for the case where the initial crystal nuclei exist). Transactions of the Japan Society of Mechanical Engineers 1996;B62(604):4212.
- Saito A, Okawa S, Iwamoto R, Shintani T. On the heat transfer characteristics of the thermal energy storage capsule in the heat removal process, using an inorganic hydrate (2nd report, discussion of the characteristics of the heat removal process, considering the nucleation and growth of the crystal). Transactions of the Japan Society of Mechanical Engineers 1996;B62(604):4220.
- Tani T, Minemoto M, Nakazawa K, Sudo Y. Study on cool storage system using CFC-11 (CCl₃F) clathrate. Kagaku Kogaku Ronbunshsu (Transactions of Chemical Engineering Japan) 1996;22(2):241.
- Yoo H, Hong H, Pak E-T. Analysis of transient thermal behaviors during charging process in stratified heat storage tanks (1st report, analytical solutions). Transactions of the Japan Society of Mechanical Engineers 1996;B62(596):1570.
- Yoshitake Y, Watanabe T, Ryu Y, Akashi Y, Tomihara N, Nakamura A. Basic performance of air conditioning system with floor thermal storage. Technology Reports Kyushu University 1996;69(5):691.

Various applications

- Amano M. Effect of steam and gas flow rate of surface sea water and deep sea water temperature change on working range in barometric type OC-OTEC system. Bulletin of the Electrotechnical Laboratory 1996;60(6):21.
- Chikahisa T, Matsuo H, Murayama T. Investigations on compact and high-performance heat pumps for cold regions (1st

report, Analysis of actual performance and a method to improve power output in low-temperature conditions). Transactions of the Japan Society of Mechanical Engineers 1996;B62(593):340.

- Chikahisa T, Matsuo H, Murayama T. Investigations on compact and high-performance heat pumps for cold regions (2nd report, estimation of performance improvement by combining heat storage system with conventional GHP). Transactions of the Japan Society of Mechanical Engineers 1996;B62(596):1591.
- Fujimoto N, Koyama S. An experimental study on a process for producing vapour growth carbon fiber using ultrafine iron catalyst particle method (effects of operational conditions on configulation of products). Thermal Science and Engineering 1996;4(4):21.
- Fujioka K, Kato S, Fujiki S, Hirata Y. Variations of molar volume and heat capacity of reactive solids of CaCl₂ used for chemical heat pumps. Journal of Chemical Engineering Japan 1995;29(6):858 (in English).
- Hasegawa H, Hashimoto K, Saikawa M, Iwatsubo T, Mimaki T. Development of two-stage compression heat pump for hot water supply in commercial use (establishment of design method for water and air heat source system), CRIEPI (Central Research Institute of Electric Power Industry) Report No.T95015, 1995; 1.
- Hayasaki H, Matsumura N, Kudo K. Improvement of thermal efficiency of a furnace for thermal electric power plant (effect of division walls). Transactions of the Japan Society of Mechanical Engineers 1996;B62(599):2806.
- Hisano K, Iwasaki H, Ishizuka M, Makita S. Thermal analysis of compact electronic equipments (1st report, thermal analysis of notebook PC). Transactions of the Japan Society of Mechanical Engineers 1996;B62(601):3453.
- Hori Y, Ito T, Izumi K. Performance of thermoelectric generation system using fluid heat sources, CRIEPI (Central Research Institute of Electric Power Industry) Report No.T95022, 1995; 1.
- Inada Y, Kinoshita N. Application of adiabatical materials to openings affected by high and low temperature. Memoirs of the Faculty of Engineering, Ehime University 1996;15(2):227.
- Ito M, Watanabe F, Asakawa M. Improvement on adsorption performance and heat transfer characteristics of silica gel by means of its direct heat exchange modulation for heat pump. Kagaku Kogaku Ronbunshu (Transactions of Chemical Engineering Japan) 1996;22(1):163.
- Ito M, Watanabe F, Hasatani M. Transient behavior of the adsorption heat pump with the multiple adsorbent-tube type adsorber. Kagaku Kogaku Ronbunshu (Transactions of Chemical Engineering Japan) 1996;22(3):582.
- Ito S, Hagiwara Y, Yatsuzuka S. Visualization and measurement of gas displacement in pulse tubes. Cryogenic Engineering 1996;31(9)481.
- Ito S, Miura N, Wang JQ. Solar assisted heat pump systems (2nd report, performance of the systems with flat-plate solar collectors). Transactions of the Japan Society of Mechanical Engineers 1996;B62(604):4227.
- Kambe M, Teraki J, Hirano T. Conceptual design of a FGM thermoelectric energy conversion system for high temperature heat source (1) (design of thermoelectric energy conversion unit). CRIEPI (Central Research Institute of Electric Power Industry) Report No.T95054, 1996.1.

- Kanzaki T, Ichikawa Y. Heat transfer around a heated building in the urban boundary layer, CRIEPI (Central Research Institute of Electric Power Industry) Report No.T95063, 1995; 1.
- Kawajiri K, Honda T, Sugimoto T. Study of free piston vuilleumier heat pump (basic performance analysis). Transactions of the Japan Society of Mechanical Engineers 1996;B62(597):2036.
- Kawajiri K, Honda T, Sugimoto T. Study of free piston vuilleumier heat pump (Performance characteristics of prototype machine at forced vibration). Transactions of the Japan Society of Mechanical Engineers 1996;B62(599):2430.
- Kawajiri K, Honda T, Sugimoto T. Study of free piston vuilleumier heat pump (performance characteristics of prototype machine at self-excited vibration). Transactions of the Japan Society of Mechanical Engineers 1996;B62(599):2826.
- Kawamoto A, Ozawa M, Arikawa F, Kataoka M. Linear analysis of acoustic characteristics in a resonance-tube refrigerator. Transactions of JAR 1996;13(2):155.
- Kimijima S, Waragai S, Uekusa T, Nakao M, Kawai S. Characteristics of single/double-effect combination absorption refrigerator, 1st report: the experimental investigation about the characteristics of absorption refrigerator driven by steam and hot water. Transactions of JAR 1996;13(2):187.
- Kuriyama T, Ohtani Y, Nakagome H, Yabuki M, Seshake H, Hashimoto T. Temperature profile and mass flow rate distributions in regenerator of Gifford–McMahon refrigerator using magnetic regenerator materials. Cryogenic Engineering 1996;31(4):203.
- Kurihara T, Fujimoto S. Numerical analysis of the performance of pneumatic drive 4 K-GM refrigerator. Cryogenic Engineering 1996;31(4):197.
- Makino K, Takahashi S, Miyagawa G. Development of mini-Stirling engines, (1st report)—, effects of the engine size on it abilities—. Research Reports of Maizuru College of Technology 1996, No. 31, 1.
- Marushima S, Sugita S, Nakamura S. A method for analyzing sensitivity of recoverable heat in a heat recovery steam generator. Transactions of the Japan Society of Mechanical Engineers 1996;B62(593):333.
- Miyama H, Kaji H, Hirose Y, Arai N. Heat transfer characteristics of a rotary regenerative combustion system (RRX). Kagaku Kogaku Ronbunshu (Transactions of Chemical Engineering Japan) 1996;22(6):1281.
- Nagasako T, Shimada M, Katayama K, Okuyama K. Numercial simulation and experiment of an unsteady thermal polymerization process of styrene in a laminar tubular reactor. Thermal Science and Engineering 1996;4(4):11 (in English).
- Nagata M. Carnot cycle and energy efficiency (improved theory of energy conversion and energy efficiency). Transactions of the Japan Society of Mechanical Engineers 1996;B62(603):3976.
- Narabayashi T, Nei H, Ozaki O, Shioiri A, Mizumachi W. Study on high-performance steam injector (1st report, development of analytical model for characteristic evaluation). Transactions of the Japan Society of Mechanical Engineers 1996;B62(597):1833.
- Nishi Y, Kinoshita I, Ueda N, Furuya M. Study on enhancement of heat transfer of reactor vessel auxiliary cooling system of fast breeder reactor, CRIEPI (Central Research Institute of Electric Power Industry) Report No.T45, 1996, 1.

- Onishi A, Li R, Asami H, Satoh T, Kanazawa Y. Development of a 1.5W-class 4 K Gifford-McMahon cryocooler. Cryogenic Engineering 1996;31(4):162.
- Saito K, Igarashi H, Kawai S. Study on the effect of the difference of absorption cycles on the characteristics of doubleeffect absorption refrigerator. Transactions of the Japan Society of Mechanical Engineers 1996;B62(595):1193.
- Shibata T, Kyaw K, Watanabe F, Matsuda H, Hasatani M. Study of CO₂ adsorptivity of adsorbents under high temperature and pressure for inorganic oxide–CO₂ chemical heat pump. Journal of Chemical Engineering Japan 1995;29(6):830 (in English).
- Seo K, Shiraishi M, Murakami M. Influence of driving frequency on temperature oscillations in a plus tube refrigerator. Cryogenic Engineering 1996;31(1):9.
- Sugano N, Saito K, Kawai S, Nishiyama N, Homma R. Simulation and experimental research of start-up characteristics of single-effect absorption refrigerators driven by waste hot water. Transactions of the Japan Society of Mechanical Engineers 1996;B62(596):1584.
- Takada S, Suzuki K, Inagaki Y, Sudo Y. Design and evaluation method of a water cooling panel system for decay heat removal from a high-temperature gas-cooled reactor. Transactions of the Japan Society of Mechanical Engineers 1996;B62(600):3109.
- Takahashi A, Kong CN, Nakatani H, Ohwase S. Studies on a pressurized type underfloor air-conditioning system (1st report: analysis of controlled factors for uniform air velocity profile). Transactions of JAR 1996;13(2):133.
- Takeda T, Takenaka S, Hishida M. Experimental study on air ingress during a primary pipe rupture accident of HTGR, (II) Experiments with graphite tubes with non-uniform temperature. Journal of Atomic Energy Society of Japan 1996;38(2):154.
- Takei T, Kimijima S, Saito K, Kawai S. Simulation analysis of the NH₃-H₂O two-stage desorption type absorption refrigerator driven by low grade waste heat. Transactions of JAR 1996;13(1):77.
- Takei T, Saito K, Kawai S. Investigation of the influence of cooling water inlet temperature on characteristics and ammonia charging quantity of ammonia–water absorption refrigerator. Transactions of JAR 1996;13(1):57.
- Tanoue K, Sato T, Imaishi N. Heat transfer and thermal diffusion phenomena in a horizontal cold-wall CVD reactor. Kagaku Kogaku Ronbunshu (Transactions of Chemical Engineering Japan) 1996;22(1):140.
- Tanzawa Y, Hashizume T, Terashima Y, Machiyama T. Dynamic behavior of a directly combined binary turbine system consisting of steam and R11 turbines (2nd report, effects of the R11 evaporator). Transactions of the Japan Society of Mechanical Engineers 1996;B62(599):2798.
- Tominaga A, Haruyama T. Electronic analog of pulse-tube refrigerators. Cryogenic Engineering 1996;31(5):267.
- Tsujimori A, Ozaki E. Performance analysis of NH₃-H₂O absorption cycle—effect of steam mixture in refrigerant—. Transactions of JAR 1996;13(1):89.
- Watanabe F, Kozuka J, Ito M, Hasatani M. Heat and mass transfer in super active carbon/ethanol adsorption heat pump with packed bed type adsorber. Kagaku Kogaku Ronbunshu (Transactions of Chemical Engineering Japan) 1996:22(4):722.

- Watanabe T, Akiyama N, Kanazawa A. Proposal of a chemical heat pump with hydrolysis of acetal for cold thermal energy generation. Kagaku Kogaku Ronbunshu (Transactions of Chemical Engineering Japan) 1996;22(6):1415.
- Yamada Y, Hihara E, Saito T. Analysis of a thermoacoustic refrigerator using a transfer matrix method. Transactions of the Japan Society of Mechanical Engineers 1996;B62(595):1185.
- Yasuda S, Okazaki K. Control of nucleation process in CVD by stratified structural change of high-voltage ultrashort pulse plasma. Transactions of the Japan Society of Mechanical Engineers 1996;B62(593):304.
- Yoneda N, Kitano M, Shimizu I. Thermal design of plastic LSI packages with fins. Transactions of the Japan Society of Mechanical Engineers 1996;B62(595):1148.

Miscellaneous

- Fudolig AM, Nogami H, Yagi J. Numerical simulation of flow and temperature distribution in a transferred argon arc plasma enclosed in a chamber. Journal of Chemical Engineering Japan 1996;29(3):508 (in English).
- Hayakawa H, Kunieda M. Numerical analysis of arc plasma temperature in EDM process based on magnetohydrodynamics. Transactions of the Japan Society of Mechanical Engineers 1996;B62(600):3171.
- Hirasawa S, Nezu H, Ohashi N, Maruyama H, Saito Y. Analysis of dry shrinkage flow process of spin-coated film on grooved semiconductor wafers. Transactions of the Japan Society of Mechanical Engineers 1996;B62(601):3421.
- Ishimaru K, Okazaki K. Quantum analysis in the transition process to excited state of an oxygen molecule induced by electron collisions. Transactions of the Japan Society of Mechanical Engineers 1996;B62(598):2350.
- Katsuta M, Matsushita M, Murase M, Nagata K, Tanaka K. Study on CPL for space use (new multi purpose theoretical model for predicting CPL performance). Transactions of the Japan Society of Mechanical Engineers 1996;B62(597):2029.
- Nakao H, Ichikawa M. Theoretical analysis on temperature rise, heat flow, and drying rate of water containing substance heated by long-wave infrared radiation and/or hot-air convection. Reports of the Faculty of Science and Technology Meijo University Nagoya Japan 1996;36(8):39.
- Nam SW, Nishiyama H, Kamiyama S. Numerical analysis on plasma spraying in a DC-RF hybrid plasma reactor. JSME International Journal 1996;B39(1):134 (in English).
- Oda A, Nakao Y, Nakashima H, Johzaki T, Muta R, Kudo K. Nuclear heating in D-T laser fusion systems. Technology Reports Kyushu University 1996;69(1):19.
- Ogawa K, Hijikata K. Measurements and numerical simulation of heat transfer of an arc plasma jet to wall. Thermal Science and Engineering 1996;4(2):1.
- Okada T, Nakata Y, Soumagne G, Kaibara H, Maeda M. Laser spectroscopic diagnostics of laser-ablation processes used for thin film deposition. Thermal Science and Engineering 1996;4(3):27 (in English).
- Sugiyama K, Miyata M, Ishiguro R, Enoto T. Flow induced by temperature gradient along wall in rarified gas container. JSME International Journal 1996;B39(2):376 (in English).

- Tanaka N, Terasaka H, Shimizu T, Takigawa Y. Incomplete discrete wavelet transform and its application to a Poisson equation solver. Journal of Nuclear Science and Technology. 1996;33(7):555 (in English).
- Tanimoto J, Hayashi T, Katayama T. A fundamental study on simplified quantification method for the passive cooling effect of soil covered construction in an urban area. Engineering Sciences Reports Kyushu University (Kyushu Daigaku Sogorikogaku Kenkyuka Hokoku) 1996;18(1):19.
- Tatsuta S, Sato Y, Tamaoki N, Egashira Y, Komiyama H. Acceleration of CVD step coverage simulation applied to DSMC method. Transactions of the Japan Society of Mechanical Engineers 1996;B62(601):3323.

Yagi M, Itoh S-I, Itoh K, Fukuyama A. On the chaotic nature

of turbulence observed in bench mark analysis of nonlinear plasma simulation. Engineering Sciences Reports Kyushu University (Kyushu Daigaku Sogorikogaku Kenkyuka Hokoku) 1996;18(2):175.

- Yamamoto T, Yamamoto T, Simizu Y, Nakamura Y, Takizawa K. Consideration of sludge formation in HFC-134a/polyol ester oil refrigeration system. Transactions of JAR 1996;13(2):167.
- Yasui K. Variation of liquid temperature at bubble wall near the sonoluminescence threshold. Journal of the Physical Society of Japan 1996;65(9):2830 (in English).
- Yoshizawa Y, Fujita T, Iwamatsu N. Pyrolysis of cellulose by microwave heating. Transactions of the Japan Society of Mechanical Engineers 1996;B62(599):2874.