

Proceedings with peer review (until FY2016)

- 1 Shigenao Maruyama, Jun Yabana, Naoka Sumi, Atsuki Komiya, Katsuo Tsukamoto and Kenji Shimizu, Measurement of diffusion field and crystal growth rate from solution in microgravity and normal gravity, Proceedings of the Joint 1st Pan-Pacific Basin Workshop and 4th Japan-China Workshop on Microgravity Sciences, Vol.15-II, Tokyo, Japan, (1998.7.8-11), pp.571-576.
- 2 Shigenao Maruyama, Atsuki Komiya, Zhixiong Guo and Toshiyuki Shimoyama, Accurate measurement of mass diffusion field and diffusion coefficient using real-time phase-shift interferometer, Proceedings of the 2nd Pacific Symposium on Flow Visualization and Image Processing, Hawaii, USA, (1999.5.16-19), CD-ROM PF-074.
- 3 Shigenao Maruyama, Kiyohiro Takahashi, Atsuki Komiya and Masud Behnia, Measurement of transient double diffusive convection and crystal growth using real-time phase-shifting interferometer, Proceedings of the Symposium on Energy Engineering in the 21st Century (SEE 2000), Vol.2, Hong Kong, China, (2000.1.9-13), pp.873-880.
- 4 Atsuki Komiya, Shigenao Maruyama, Seigo Sakai and Katsuo Tsukamoto, Influence of gravity upon transient diffusion fields of aqueous solutions, Proceedings of the 2nd Pan-Pacific Basin Workshop on Microgravity Sciences, Pasadena, USA, (2001.5.1-4), CD-ROM TP-1121.
- 5 Atsuki Komiya, Satoshi Matsumoto and Shinichi Yoda, Modeling of transition mechanism to oscillatory Marangoni flow in a liquid bridge, Proceedings of the 42nd AIAA Aerospace Sciences Meeting & Exhibit, Reno, USA, (2004.1.5-8), AIAA-2004-0963.
- 6 Maatouk Khoukhi, Shigenao Maruyama, Stephen Bosi, Atsuki Komiya and Masud Behnia, A new simple approach for calculating the optical constants of a clear glass window from 0.19 to 5 μ m, Official Proceedings of the 29th Annual National Conference of the Solar Energy Society of Canada Inc., Ontario, Canada, (2004.8.21-25), pp.1-7.
- 7 Shigenao Maruyama and Atsuki Komiya, In-situ measurement of small diffusion field using phase-shifting interferometer, Proceedings of the 5th Pacific Symposium on Flow Visualization and Image Processing, Daydream Island, Australia, (2005.9.26-29), CD-ROM 106.
- 8 Atsuki Komiya and Shigenao Maruyama, Development of an optical visualization system for small transient diffusion fields, Proceedings of the 5th Pacific Symposium on Flow Visualization and Image Processing, Daydream Island, Australia, (2005.9.26-29), CD-ROM 225.
- 9 Atsushi Sakurai, Masud Behnia, Shigenao Maruyama, Atsuki Komiya and Seigo Sakai, Natural convection and radiative heat transfer of an enclosure containing a participating medium using REM² and LES, Proceedings of the Eurotherm78 – Computational Thermal Radiation in Participating Media II, Poitiers, France, (2006.4.5-7), pp.399-408.
- 10 Atsuki Komiya, Shigenao Maruyama and Shuichi Moriya, Measurement of mass diffusion coefficient of micro quantity proteins using phase shifting interferometer, Proceedings of the 13th International Heat Transfer Conference, Sydney, Australia, (2006.8.13-18), CD-ROM MST-10.
- 11 Shigenao Maruyama, Hiroki Takeda, Atsuki Komiya, Tomoyuki Yambe and Nobukazu Nakasato, Brain mapping method utilizing rapid cooling probe, Proceedings of the 17th International Symposium on Transport Phenomena, Toyama, Japan, (2006.9.4-8), CD-ROM 1-D-I-4.

- 12 Atsushi Sakurai, Shigenao Maruyama, Masud Behnia, Atsuki Komiya and Seigo Sakai, Conjugate simulation of nongray radiative heat transfer and natural convection in a participating media using DOREM, REM², and LES, Proceedings of the International Symposium on Turbulence, Heat and Mass Transfer 5, Dubrovnik, Croatia, (2006.9.25-29), pp.539-542.
- 13 Junnosuke Okajima, Shigenao Maruyama and Atsuki Komiya, Analytical study of temperature distribution in biological tissue, Proceedings of the 15th International Conference on Mechanics in Medicine and Biology, Singapore, (2006.12.6-8), pp.403-406.
- 14 Atsushi Sakurai, Shigenao Maruyama, Masud Behnia, Atsuki Komiya and Takuya Kawabe, Three-dimensional nongray radiative heat transfer in conjunction with turbulent natural convection using DOREM and LES, Proceedings of the Fifth International Symposium on Radiative Transfer, Bodrum, Turkey, (2007.6.17-22), CD-ROM 48.
- 15 Atsuki Komiya, Shigenao Maruyama and Shuichi Moriya, Development of precise visualization system for small transient diffusion field of protein using phase shifting interferometer, Proceedings of ASME-JSME Thermal Engineering and ASME Summer Heat Transfer Conference, Vancouver, Canada, (2007.7.8-12), CD-ROM HT2007-32617.
- 16 Hiroki Takeda, Shigenao Maruyama, Setsuya Aiba and Atsuki Komiya, Precise control of frozen region during cryosurgery utilizing Peltier effect, Proceedings of ASME-JSME Thermal Engineering and ASME Summer Heat Transfer Conference, Vancouver, Canada, (2007.7.8-12), CD-ROM HT2007-32651.
- 17 Atsuki Komiya, Shigenao Maruyama and Shuichi Moriya, Spatial-high-resolution measurement of diffusion field for evaluation of concentration dependency of diffusion coefficient, Proceedings of the 8th Asian Thermophysical Properties Conference, Fukuoka, Japan, (2007.8.21-24), CD-ROM 095.
- 18 Atsushi Sakurai, Shigenao Maruyama, Koji Miyazaki and Atsuki Komiya, Phonon transport simulation for nano/microscale heat conduction, Proceedings of the 8th Asian Thermophysical Properties Conference, Fukuoka, Japan, (2007.8.21-24), CD-ROM 100.
- 19 Tetsuya Sato, Shigenao Maruyama, Atsuki Komiya and Koutaro Tsubaki, Numerical simulation of upwelling flow in pipe generated by perpetual salt fountain, Proceedings of the 16th Australasian Fluid Mechanics Conference, Gold Coast, Australia, (2007.12.3-7), pp.394-397.
- 20 Shigenao Maruyama, Atsuki Komiya, Hiroki Takeda and Setsuya Aiba, Development of precise-temperature-controlled cooling apparatus for medical application by using Peltier effect, Proceedings of 2008 International Conference on BioMedical Engineering and Informatics, Hainan, China, (2008.5.27-30), pp.610-614.
- 21 Atsuki Komiya, Kaoru Maruta, Yoshikatsu Nakano and Toshiyuki Hashida, Visualization of transient concentration field in process of carbon dioxide absorption at gas-liquid surface, Proceedings of International Symposium on Flow Visualization, Nice, France, (2008.7.1-4), CD-ROM 127.
- 22 Hiroki Takeda, Shigenao Maruyama, Junnosuke Okajima, Setsuya Aiba and Atsuki Komiya, Precise control of cooing and heating rate utilizing Peltier cryoprobe for cryosurgery, Proceedings of the 19th International Symposium on Transport Phenomena, Reykjavik, Iceland, (2008.8.17-20), CD-ROM 141.

- 23 Atsuki Komiya, Nicholas Williamson, Nagarathinam Srinarayana, Masud Behnia, Steven W. Armfield and Shigenao Maruyama, Visualization of upwelled saline flow and its transition behaviour from steady to oscillatory regimes, Proceedings of the 19th International Symposium on Transport Phenomena, Reykjavik, Iceland, (2008.8.17-20), CD-ROM 147.
- 24 Shigeru Takashima, Naoya Ogasawara, Shigenao Maruyama, Atsuki Komiya, Takashi Seki and Tomoyuki Yambe, Development of precise heat transfer control device for thermal therapy, Proceedings of the 2nd International Forum on Heat Transfer, Tokyo, Japan, (2008.9.17-19), CD-ROM 171.
- 25 Masazumi Chisaki, Shigenao Maruyama, Mahe Perrette, Atsuki Komiya and Takashi Yabuki, A comparison for diffusion process of artificial upwelling of nutrient-rich seawater simulated by k - ε model and large eddy simulation, Proceedings of the 2nd International Forum on Heat Transfer, Tokyo, Japan, (2008.9.17-19), CD-ROM 211.
- 26 Mehdi Baneshi, Shigenao Maruyama and Atsuki Komiya, The effect of particle size distribution on performance of a pigmented coating considering both thermal and aesthetic effects, Proceedings of the Seventh JSME-KSME Thermal and Fluids Engineering Conference, Sapporo, Japan, (2008.10.13-16), CD-ROM J-313.
- 27 Hiroki Takeda, Junnosuke Okajima, Setsuya Aiba, Atsuki Komiya, Subhash C. Mishra and Shigenao Maruyama, Precise and rapid cooling of skin tissue for cryosurgery utilizing Peltier effect in extremely low temperature, Proceedings of the 7th World Conference on Experimental Heat Transfer, Fluid Mechanics and Thermodynamics (ExHFT-7), Krakow, Poland, (2009.6.28-7.3), CD-ROM BS-5.
- 28 Junnosuke Okajima, Shigenao Maruyama and Atsuki Komiya, Boiling heat transfer in small channel for development of ultrafine cryoprobe, Proceedings of the 7th World Conference on Experimental Heat Transfer, Fluid Mechanics and Thermodynamics (ExHFT-7), Krakow, Poland, (2009.6.28-7.3), CD-ROM BS-7.
- 29 Atsuki Komiya, Juan Felipe Torres Alvarez, Junnosuke Okajima and Shigenao Maruyama, Experimental trial to determine mass diffusion coefficients in multi-component system, The Proceedings of the 7th Pacific Symposium on Flow Visualization and Image Processing, Kaohsiung, Taiwan, (2009.11.16-19), CD-ROM 066.
- 30 Shigenao Maruyama, Masazumi Chisaki, Atsuki Komiya and Ryo Shirakashi, A proposal of low CO₂ emission power generation system utilizing oceanic methane hydrate, Proceedings of the International Conference on Power Engineering-09, Kobe, Japan, (2009.11.16-20), pp.2_343-2_348.
- 31 Mehdi Baneshi, Shigenao Maruyama and Atsuki Komiya, Aesthetic and thermal performances of black cupric oxide and titanium dioxide nano-particulate coatings, Proceedings of the 6th International Symposium on Radiative Transfer, Antalya, Turkey, (2010.6.13-19), CD-ROM 81-Paper08.
- 32 Atsuki Komiya, Juan Felipe Torres Alvarez, Junnosuke Okajima, Shuichi Moriya, Shigenao Maruyama and Masud Behnia, An investigation of concentration dependency of mass diffusion coefficients in multi-component diffusion, Proceedings of the 14th International Heat Transfer Conference, Washington D.C., USA, (2010.8.9-13), CD-ROM IHTC-22501.

- 33 Junnosuke Okajima, Shigenao Maruyama, Hiroki Takeda, Atsuki Komiya and Sangkwon Jeong, Cooling characteristics of ultrafine cryoprobe utilizing convective boiling heat transfer in microchannel, Proceedings of the 14th International Heat Transfer Conference, Washington D.C., USA, (2010.8.9-13), CD-ROM IHTC-22550.
- 34 Tilek Aberra, Steven W. Armfield, Masud Behnia, Shigenao Maruyama and Atsuki Komiya, Numerical study of 3D nonlinear disturbance growth in transitional natural convection, Proceedings of the 14th International Heat Transfer Conference, Washington D.C., USA, (2010.8.9-13), CD-ROM IHTC-23300.
- 35 Atsuki Komiya, Juan Felipe Torres Alvarez, Junnosuke Okajima and Shigenao Maruyama, Measurement of the concentration dependency of mass diffusion coefficients in aqueous binary solutions by phase-shifting interferometer, Proceedings of the Ninth Asian Thermophysical Properties Conference, Beijing, China, (2010.10.19-22), CD-ROM ATPC9-109254.
- 36 Atsuki Komiya, Mikihito Watanabe, Takashi Yabuki and Shigenao Maruyama, Effect of eddy diffusivity on the upwelling flow rate of perpetual salt fountain, Proceedings of the 21st International Symposium on Transport Phenomena, Kaohsiung, Taiwan, (2010.11.2-5), CD-ROM 146.
- 37 Hiroki Gonomi, Mehdi Baneshi, Atsuki Komiya and Shigenao Maruyama, Control of radiative properties of coatings pigmented with Fe_2O_3 nanoparticles, Proceedings of AJTEC2011 ASME/JSME 8th Thermal Engineering Joint Conference, Hawaii, USA, (2011.3.14-3.17), CD-ROM AJTEC2011-44622. *東日本大震災被災により不参加. Chairより発表済を認められる
- 38 Shigenao Maruyama, Koji Deguchi and Atsuki Komiya, Formation and dissociation of oceanic methane hydrate for a low CO_2 emission power generation system, Proceedings of ASME 2011 Power Conference POWER 2011, Denver, USA, (2011.7.12-14), CD-ROM POWER2011-55308.
- 39 Tatsuya Kobari, Atsuki Komiya, Shuichi Moriya, Seiji Kosaka, Yashikatsu Nakano and Shigenao Maruyama, Visualization of flow patterns in differently shaped cooling channels of pistons, Proceedings of the 8th Pacific Symposium on Flow Visualization and Image Processing, Moscow, Russia, (2011.8.21-25), CD-ROM 034.
- 40 Junnosuke Okajima, Atsuki Komiya and Shigenao Maruyama, Theoretical study for high heat flux cooling by using phase change heat transfer in a microchannel, Proceedings of the 4th International Conference on Heat Transfer and Fluid Flow in Microscale, Fukuoka, Japan, (2011.9.4-9), USB HTFFM-IV-101.
- 41 Eita Shoji, Atsuki Komiya, Junnosuke Okajima and Shigenao Maruyama, Visualization and measurement of natural convection around vertical flat plate by common path phase-shifting interferometer, Proceedings of the 22nd International Symposium on Transport Phenomena, Delft, Netherlands, (2011.11.8-11), CD-ROM 62.
- 42 Junnosuke Okajima, Atsuki Komiya and Shigenao Maruyama, Development of cryosurgical system in small region utilizing phase change in a microchannel, Proceedings of the Eighth KSME-JSME Thermal and Fluid Engineering Conference, Incheon, Korea, (2012.3.18-21), CD-ROM FR04-002.
- 43 Eita Shoji, Shion Kon, Atsuki Komiya, Junnosuke Okajima and Shigenao Maruyama, Visualization and measurement of laminar natural convection in square enclosure, Proceedings of the 3rd International Forum on Heat Transfer (IFHT2012), Nagasaki, Japan, (2012.11.13-15), USB IFHT2012-073.

- 44 Eita Shoji, Atsuki Komiya, Junnosuke Okajima and Shigenao Maruyama, Measurement of temperature distribution natural convection around vertical heated flat plate by using inverse Abel transform and phase-shifting interferometer, Proceedings of the 23rd International Symposium on Transport Phenomena, Auckland, New Zealand, (2012.11.19-22), CD-ROM 166.
- 45 Atsuki Komiya and Jérôme Chevalier, Experimental trial to active control of protein mass flux in hindered diffusion field, Proceedings of the 23rd International Symposium on Transport Phenomena, Auckland, New Zealand, (2012.11.19-22), CD-ROM 268.
- 46 Hiroki Gonomé, Mehdi Baneshi, Junnosuke Okajima, Atsuki Komiya and Shigenao Maruyama, Thermal performance of black cupric oxide submicron-particulate coatings: exposure temperature measurement, Proceedings of the 7th International Symposium on Radiative Transfer, Kusadasi, Turkey, (2013.6.2-8), CD-ROM RAD-13-SH2.
- 47 Yuya Takahashi, Junnosuke Okajima, Yuka Iga, Atsuki Komiya, Wu-Shung Fu and Shigenao Maruyama, Study of supersonic micro-channel for cooling electronics devices, Proceedings of the ASME 2013 11th International Conference on Nanochannels, Microchannels, and Minichannels, Sapporo, Japan, (2013.6.16-19), CD-ROM ICNMM2013-73134.
- 48 Eita Shoji, Ryota Nakaoku, Atsuki Komiya, Junnosuke Okajima and Shigenao Maruyama, Quantitative visualization of boundary layers using quasi common path phase-shifting interferometer, Proceedings of the 8th World Conference on Experimental Heat Transfer, Fluid Mechanics, and Thermodynamics (ExHFT8), Lisbon, Portugal, (2013.6.16-20), USB-166.
- 49 Atsuki Komiya, Jérôme Chevalier, Sébastien Pruvost and Sébastien Livi, Quantitative evaluation of protein mass flux in the vicinity of thin plate surface, Proceedings of the 8th World Conference on Experimental Heat Transfer, Fluid Mechanics, and Thermodynamics (ExHFT8), Lisbon, Portugal, (2013.6.16-20), USB-447.
- 50 Shigenao Maruyama, Eita Shoji, Junnosuke Okajima and Atsuki Komiya, Measurement of boundary layers using phase-shifting quasi common path interferometer, Proceedings of the 9th Pacific Symposium of Flow Visualization and Image Processing (PSFVIP-9), Busan, Korea, (2013.8.25-28), pp.37-43.
- 51 Hidemasa Fujita, Seiji Kanazawa, Kiyonobu Ohtani, Atsuki Komiya and Takehiko Sato, Highly spatiotemporal visualization of streamer propagations in water, Proceedings of the Twelfth International Conference on Fluid Control, Measurements, and Visualization (FLUCOME 2013), Nara, Japan, (2013.11.18-23), USB OS13-02-3.
- 52 Junnosuke Okajima, Atsuki Komiya and Shigenao Maruyama, Evaluation on characteristics of phase change heat transfer in ultrafine cryoprobe, Proceedings of the Twelfth International Conference on Fluid Control, Measurements, and Visualization (FLUCOME 2013), Nara, Japan, (2013.11.18-23), USB OS12-02-2.
- 53 Junnosuke Okajima, Atsuki Komiya and Shigenao Maruyama, Experimental and numerical evaluation of small-scale cryosurgery using ultrafine cryoprobe, Proceedings of the ASME 2013 4th International Conference on Micro/Nanoscale Heat and Mass Transfer, Hong Kong, China, (2013.12.11-14), USB MNHMT2013-22119.

- 54 Hidemasa Fujita, Seiji Kanazawa, Kiyonobu Ohtani, Atsuki Komiya, Toshiro Kaneko and Takehiko Sato, Role of continuous discharge current for secondary streamer in water, Proceedings of International Symposium on Electrohydrodynamics 2014 (ISEHD2014), Okinawa, Japan, (2014.6.23-25), USB p24.
- 55 Eita Shoji, Junnosuke Okajima, Atsuki Komiya, Shuichi Moriya, Hiroshi Kawamura and Shigenao Maruyama, Quantitative and high-speed measurement of temperature field by phase-shifting interferometer, Proceedings of the 16th International Symposium on Flow Visualization (ISFV-16), Okinawa, Japan, (2014.6.24-27), ISFV16-1254.
- 56 Yoichiro Tsurimaki, Pierre-Olivier Chapuis, Rodolphe Vaillon, Junnosuke Okajima, Atsuki Komiya and Shigenao Maruyama, Reducing thermal radiation between parallel plates in the far-to-near field transition regime, Proceedings of the 15th International Heat Transfer Conference (IHTC-15), Kyoto, Japan, (2014.8.10-15), USB IHTC15-9188.
- 57 Junnosuke Okajima, Takahiro Okabe, Tessai Sugiura, Atsuki Komiya, Takashi Seki and Shigenao Maruyama, Estimation of blood perfusion rate and its temperature dependency in human abdominal area under heating condition, Proceedings of the 15th International Heat Transfer Conference (IHTC-15), Kyoto, Japan, (2014.8.10-15), USB IHTC15-9884.
- 58 Jeff Mayo, Yoichiro Tsurimaki, Pierre-Olivier Chapuis, Junnosuke Okajima, Atsuki Komiya, Shigenao Maruyama, Arvind Narayanaswamy and Rodolphe Vaillon, Thermal radiation between two plates: regime map and analytical expressions for the net radiative heat flux from far to near field, Eurotherm 103 Nanoscale and Microscale Heat Transfer IV, Lyon, France, (2014.10.15-17), pp.121-123.
- 59 Yuya Takahashi, Junnosuke Okajima, Yuka Iga, Atsuki Komiya and Shigenao Maruyama, Measurement of density field of supersonic flow inside a micro-channel by phase shifting interferometer, Proceedings of the 25th International Symposium on Transport Phenomena (ISTP-25), Krabi, Thailand, (2014.11.5-7), USB Paper-103.
- 60 Junnosuke Okajima, Yuta Aizawa, Ken Hou, Paul Zehner, Atsuki Komiya and Shigenao Maruyama, Numerical investigation on thermal and hydrodynamical behavior of expanding single bubble in microchannel, Proceedings of the 25th International Symposium on Transport Phenomena (ISTP-25), Krabi, Thailand, (2014.11.5-7), USB Paper-110.
- 61 Hiroki Gonomi, Hirotoshi Sasaki, Junnosuke Okajima, Atsuki Komiya and Shigenao Maruyama, Performance evaluation about low CO₂ emission power generation system utilizing ocean methane hydrate, Proceedings of ASME-ATI-UIT 2015 Conference on Thermal Energy Systems: Production, Storage, Utilization and the Environment, Naples, Italy, (2015.5.17-20), USB 045.
- 62 Takuma Kogawa, Junnosuke Okajima, Atsuki Komiya, Steven Armfield and Shigenao Maruyama, Evaluation of radiation effect to the heat and fluid flow characteristics in the turbulent natural convection of square, Papers of the 26th International Symposium on Transport Phenomena (ISTP-26), Leoben, Austria, (2015.9.27-10.1), USB 136.
- 63 Toru Saito, Atsuki Komiya, Junnosuke Okajima and Shigenao Maruyama, Simultaneous measurement of concentration and flow fields in CO₂ absorption process, Papers of the 26th International Symposium on Transport Phenomena (ISTP-26), Leoben, Austria, (2015.9.27-10.1), USB 138.

- 64 Hiroki Gonomé, Hirotoshi Sasaki, Junnosuke Okajima, Atsuki Komiya and Shigenao Maruyama, Evaluation of power generation system utilizing ocean methane hydrate and chemical carbon capture and storage system, Proceedings of the International Conference on Power Engineering-15 (ICOPE-15), Yokohama, Japan, (2015.11.30-12.4), CD-ROM ICOPE-15-1012.
- 65 Guillaume Lacaille, Hikaru Yamada, Hiroki Gonomé, Eita Shoji, Lin Chen, Junnosuke Okajima, Atsuki Komiya and Shigenao Maruyama, Experimental evaluation of heat and mass transfer in a mimicked methane hydrate reservoir, Proceedings of the First Thermal Engineering Conference (PRTEC), Hawaii, USA, (2016.3.13-17), PRTEC-15009.
- 66 Lin Chen, Hikaru Yamada, Yuki Kanda, Junnosuke Okajima, Atsuki Komiya and Shigenao Maruyama, Study of methane hydrate as a future energy resource: low emission extraction and power generation, Proceedings of the 2016 International Conference on New Energy and Future Energy System (NEFES 2016), Beijing, China, (2016.8.19-22), 012074.
- 67 Yuki Kanda, Eita Shoji, Junnosuke Okajima, Atsuki Komiya, Lin Chen, Hikaru Yamada and Shigenao Maruyama, Visualization of transient mass transfer during methane hydrate dissociation using high-speed phase-shifting interferometer, Proceedings of the 27th International Symposium on Transport Phenomena (ISTP2016), Honolulu, Hawaii, USA (2016.9.20-23), ISTP27-127.
- 68 Takahiro Okabe, Junnosuke Okajima, Taku Fujimura, Atsuki Komiya, Setsuya Aiba and Shigenao Maruyama, Investigation of effect of skin structure and temperature distribution in body on non-invasive measurement of effective thermal conductivity of human skin, Proceedings of the Fourth International Forum on Heat Transfer (IFHT2016), Sendai, Japan (2016.11.2-4), IFHT2016-1910.
- 69 Toru Saito, Atsuki Komiya, Junnosuke Okajima and Shigenao Maruyama, Visualization of CO₂ absorption process in the vicinity of gas-liquid interface, Proceedings of the Fourth International Forum on Heat Transfer (IFHT2016), Sendai, Japan (2016.11.2-4), IFHT2016-2021.