

付録 G

全参考文献リスト

- [1] Abe, T., "Derivation of the Lattice Boltzmann Method by means of the Discrete Ordinate Method for the Boltzmann Equation", *J. Comp. Phys.*, Vol. 131, pp.241-246 (1997).
- [2] Abe, Y. and Adachi, H., "Flow Characteristics of Counter-Current Flow in Debris Bed", Proc. 4th Int. Top. Mtg. on Nucl. Thermal Hydraulics, Operation and Safety, pp.11C-1-11C-8 (1994).
- [3] Abe, Y. and Adachi, H., "Flow Characteristics of Counter-Current Flow in Debris Bed", *Nucl. Sci. J.*, Vol. 31(6), pp.431-443 (1994).
- [4] Abe, Y. and Kobayashi, T., "Visual Observation of Film Boiling Collapse Behavior on High Temperature Particle Surface by Passing Pressure Pulse", Proc. 5th ASME/JSME Joint Thermal Eng. Conf., San Diego, ATJE-6445 (1999).
- [5] Abe, Y. and Sudo, Y., "Short Note: Prediction of Dryout Heat Flux for Particle Bed Simulating Degraded Core in LWR Severe Core Damage Accidents", *Nucl. Sci. Tech.*, Vol. 21(12), pp.962-964 (1984)
- [6] Abe, Y. and Tochio, D., "Micro-Mechanism of Vapor Film Collapse on High Temperature Particle Surface", 7th Int. Conf. on Nucl. Eng., ICONE-7370 (1999).
- [7] Abe, Y. et al., "Elimination of Numerical Pressure Spikes Induced by Two Fluid Model", *Nucl. Sci. and Tech.*, Vol. 30(12), pp.1214-1224 (1993).
- [8] Abe, Y. et al., "Study on the Micro-Mechanism on Vapor Film Collapse on High Temperature Particle Surface", Proc. 4th JSME-KSME Thermal Eng. Conf. (2000).
- [9] Abe, Y., "Applicability of Annular Flow Model to Counter-Current Flow in Debris Bed", *Nucl. Sci. Tech.*, Vol. 32(8), pp.763-772 (1995).
- [10] Abe, Y., "Measurement of Wall and Interfacial Friction Factors for Counter-Current Flow in Porous Bed", Proc. 5th ASME/JSME Joint Thermal Engineering Conference, San Diego, ATJE-6444 (1999).
- [11] Abolfadl, M. A. and Theofnous, T. G., "An Assessment of Steam-Explosion-Induced Containment Failure Part II: Premixing Limits", *Nucl. Sci. Eng.*, Vol. 97, pp.282-295 (1987).
- [12] Adachi, H. et al., "Nonequilibrium Thermodynamic Behavior at the Interface between Steam Film on the Surface of High Temperature Premixing Liquid Drop and the Surrounding Water During Steam Explosion", Proc. 11th Int. Heat Transfer Conf., Vol. 5, pp.81-86 (1998).
- [13] Addabbo, C. et al., "Synopsis of the Results of ISP-39 on FARO Test L-14", Proc. OECD / CSNI Specialists Mtg. on Fuel-Coolant Interactions, Tokai-mura, Japan, Vol. 2, pp.493-566 (1997).
- [14] Aizawa, T. and Benson, D. J., "Eulerian Analysis with Lagrangian Stepping of Triggering Mechanism for Shock Chemistry through Multi-Phase Materials", A Multidisciplinary Int. Sem. Intense Multiphase Interaction, Santa Barbara, pp.159-173 (1995).
- [15] Aizawa, T., "High Speed Mass Mixing Mechanism and Reactions in Binary Material System of Refractory Metal and Alminum", A Multidisciplinary Int. Sem. Intense Multiphase Interaction, Santa Barbara, pp.189-192 (1995).
- [16] Akiyoshi, R. et al., "An Attempt to Produce Particles of Amorphous Metals Utilizing Vapor Explosion", Proc. Int. Sem. on the Physics of Vapor Explosion, Tomakomai, pp.70-77 (1993).
- [17] Akiyoshi, R. et al., "Study on the Effect of Non-condensable gas in the Vapor Film on Vapor Explosion",

- Int. J. Heat Mass Transfer, Vol. 33(4), pp.603-609 (1990).
- [18] Alexander, F. J. et al., "Lattice Boltzmann Thermohydrodynamics", Phys. Rev. E, Vol. 47(4), pp.R2249-R2252 (1993).
- [19] Allen, M. D. et al., "Experimental Results of Integral Effects Tests with 1/10th Scale Zion Subcompartment Structures in the Surtsey Test Facility", Nucl. Eng. Des., Vol. 155, pp.475-494 (1995).
- [20] Almstrom, H. et al., "Significance of Fluid-Structure Interaction Phenomena for Containment Response to Ex-Vessel Steam Explosions", Nucl. Eng. Design, Vol. 189, pp.405-422 (1999).
- [21] Amarasoorya, W. H. and Theofanous, T. G., "Premixing of Steam Explosions: A Three Fluid Model", Nucl. Eng. Des., Vol. 126, pp.23-39 (1991).
- [22] Amarasoorya, W. H. and Theofanous, T. G., "An Assessment of Steam-Explosion-Induced Containment Failure Part III: Expansion and Energy Partition", Nucl. Sci. Eng., Vol. 97, pp.296-315 (1987).
- [23] Anderson, J. A. and Sienicki, K. K., "Thermal Behavior of Molten Corium during the Three Mile Island Unit 2 Core Relocation Event", Nucl. Tech., Vol. 87, pp.283-293 (1989).
- [24] Anderson, R. P. and Armstrong D. R., Annual ASME Winter Meeting, Nucl. Reactor Safety Heat Transfer Section, Atlanta, Georgia, pp.31 (1977).
- [25] Anderson, R. P. and Bova, L., "Final Report on the Small-Scale Vapor-Explosion Experiments Using a Molten NaCl-H₂O System", ANL-76-57, pp.1-40 (1976).
- [26] Anderson, R. et al., "Experimental and Analytical Study of Vapor Explosions in Stratified Geometries", CONF-880724-20 (1988).
- [27] Angelini, S. et al., "Multiphase Transients in the Premixing of Steam Explosions", Proc. 5th Int. Top. Mtg. on Nucl. Reactor Thermal Hydraulics, pp.471-478 (1992).
- [28] Angelini, S. et al., "On the Regimes of Premixing", Nucl. Eng. Design, Vol. 189, pp.139-161 (1999).
- [29] Angelini, S. et al., "Premixing-related Behavior of Steam Explosions", Nucl. Eng. Des., Vol. 155, pp.115-157 (1995).
- [30] Angelini, S. et al., "The Mixing of Particle Clouds Plunging into Water", A Multidisciplinary Int. Sem. Intense Multiphase Interaction, Santa Barbara, pp.98-116 (1995).
- [31] Annunziato, A. and Addabbo, C., "COMETA (core melt thermal-hydraulic analysis) a computer code for melt quenching analysis", Proc. CSNI Specialists Meeting on FCI, Santa Barbara, U. S. (NUREG / CP-0127), pp.233-250 (1993).
- [32] Annunziato, A. et al., "FARO and KROTOS Code Simulations and Analysis at JRC Ispra", Nucl. Eng. Design, Vol. 189, pp.359-378 (1999).
- [33] Annunziato, A. et al., "FARO and KROTOS Code Simulation and Analysis at JRC Ispra", Proc. OECD / CSNI Specialists Mtg. on Fuel-Coolant Interactions, Tokai-mura, Japan, Vol. 2, pp.751-768 (1997).
- [34] Annunziato, A. et al., "FARO tests L-14 on fuel coolant interaction and quenching-comparison report, Volume I: Analysis of results", technical Report NEA / CSNI/ R(97)31 /Part I, OECD / NEA / CSNI (1998).
- [35] Antariksawan, A. R. et al., "The Premixing and Propagation Phases of Fuel-Coolant Interactions: A

- Review of Recent Experimental Studies and Code Development”, JAERI-Review 98-012 (1998).
- [36] Appert, C. et al., “A Liquid-Gas Model on a Lattice”, Physica D, Vol. 47, pp.85-96 (1991).
 - [37] Appert, C. et al., “Phase Separation in a Three-Dimensional, Two-Phase, Hydrodynamic Lattice Gas”, J. Stat. Phys., Vol. 81, pp.181-197 (1995).
 - [38] Arakeri, V. H. et al., “An Experimental Study of the Molten Glass/Water Thermal Interaction Under Free and Forced Conditions”, Nucl. Sci. Eng., Vol. 66, pp.153-166 (1978).
 - [39] Baines, M. et al., “The Hydrodynamics of Large-Scale Fuel-Coolant Interactions”, Nucl. Tech., Vol. 49, pp.27-39 (1980).
 - [40] Bandini, G., “TMI-2 Accident Analysis with SCDAP/RELAP5 Code”, Proc. Workshop on Severe Accident Research, Japan (SARJ-99) (1999).
 - [41] Bang, K. H. and Corradini, M. L., “Thermodynamic Analysis of Vapor Explosions: Comparison of Models”, Proc. 5th Int. Top. Mtg. on Nucl. Reactor Thermal Hydraulics (NURETH-5), Vol. 3, pp.883-889 (1992).
 - [42] Bang, K. H. and Corradini, M. L., “Vapor Explosions in a Stratified Geometry”, Nucl. Sci. Eng., Vol. 108, pp.88-108 (1991).
 - [43] Bang, K. H. et al., “TRACER-II: A Complete Computational Model for Mixing and Propagation of Vapor Explosions”, Proc. OECD / CSNI Specialists Mtg. on Fuel-Coolant Interactions, Tokai-mura, Japan, Vol. 2, pp.804-817 (1997).
 - [44] Bang, K. H., “The Role of Fragmentation Rate in Vapor Explosion Propagation: Comparison of Models”, Proc. Int. Sem. on the Physics of Vapor Explosions, Tomakomai, pp.229-233 (1993).
 - [45] Bankoff, S. G. and Horin, W. A., “Hollow Sphere Formation in a Gassy Two-Liquid Pool”, Let. in Heat and Mass Transfer, Vol. 4, pp.225-229 (1977).
 - [46] Bankoff, S. G. and Jo, J. H., NU2512-8 (1976).
 - [47] Bankoff, S. G., “Vapor Explosions: A Critical Review”, Keynote Address Sixth International Heat Transfer Conference, Toronto, Canada (1978).
 - [48] Barleon, L. et al., “Cooling of Debris Beds”, Nucl. Tech., Vol. 65, pp.67-86 (1984).
 - [49] Bennett, C. O. and Myers J. E., “Momentum, Heat and Mass Transfer”, McGRAW-HILL BOOK COMPANY (1983).
 - [50] Benz, R. et al., “Melt/Water Interactions in Tank Geometry: Experimental and Theoretical Results”, 4th CSNI Specialist Mtg. on Fuel-Coolant Interaction in Nucl. Reactor Safety, Bournemouth, Vol. 1, pp.363-386 (1979).
 - [51] Berthoud, G. and Valette, M., “Development of a Multidimensional Model for the Premixing Phase of a Fuel-Coolant Interaction”, Proc. 6th Int. Top. Mtg. on Nucl. Reactor Thermal Hydraulics, pp.115-125 (1993).
 - [52] Berthoud, G. et al., “Premixing of Corium into Water during Fuel-Coolant Interaction: The Models Used in the 3 Field Version of the MC3D Code and Two Examples of Validation on Billeau Faro Experiments”, Proc. Workshop on Severe Accident Research held in Japan (SARJ-97), pp.769-783 (1997).

- [53] Bird, M. J. and Millington, R. A., "Fuel-Coolant Interaction Studies with Water and Thermite Generated Molten Uranium Dioxide", 4th CSNI Specialist Mtg. on Fuel-Coolant Interaction in Nucl. Reactor Safety, Bournemouth, Vol. 1, pp.420-449 (1979).
- [54] Bird, M. J. et al., "Experimental Studies of Thermal Interactions between Thermite Generated Molten Fuel and Sodium", Proc. LMFBR Safety Top. Mtg., Lyon, Vol. 3, pp.3-439-3-448 (1982).
- [55] Bird, R. B., "Transport phenomena", John Wiley & Sons, Inc. (1960).
- [56] Blose, R. E. et al., "SWISS: sustained Heated Metallic Melt/Concrete Interactions with Overlying Water Pools", NUREG/CR-4727, SAND-1546 (1987).
- [57] Board, S. J. and Hall R. W., Proc. of the 3rd Specialist Meeting on Na/Fuel Interactions in Fast Reactors, Tokyo, Japan, pp.249 (1976).
- [58] Board, S. J. et al., "An Experimental Study of Energy Transfer Processes Relevant to Thermal Explosions", Int. J. Heat and Mass Transfer, Vol. 14, pp.1631-1641 (1971).
- [59] Board, S. J. et al., "Detonation of Fuel Coolant Explosions", Nature, Vol. 254, pp.319-321 (1975).
- [60] Board, S. J. et al., "Fragmentation in Thermal Explosions", Int. J. Heat Mass Transfer, Vol. 17, pp.331-339 (1974).
- [61] Brayer, C. and Berthoud, G., "First Vapor Explosion Calculations Performed with MC3D Thermal-Hydraulic Code", Proc. OECD / CSNI Specialists Mtg. on Fuel-Coolant Interactions, Tokai-mura, Japan, Vol. 1, pp.391-409 (1997).
- [62] Briggs, A. J., "Steam Explosion Studies at Winfrith", 12th Water Reactor Safety Information Mtg., Vol. 3, pp.323-337 (1984).
- [63] Briggs, A. J., "Steam Explosions and Reactor Safety", CSNI Report No. 74, pp.1-24 (1982).
- [64] Buchanan, D. J., "A Model for Fuel-Coolant Interactions", J. Phys. D, Vol. 7, pp.1441-1457 (1974).
- [65] Bui, V. A. et al., "Deformation and Fragmentation of a Melt Drop in Flow Field: Results of a Numerical Study by a Level-Set Method", Proc. Int. Sem. on Vapor Explosion and Explosive Eruptions, Sendai, pp.67-81 (1997).
- [66] Burger, M. et al., "Analysis of Thermal Detonation Experiments by Means of a Transient Multi-Phase Detonation Code", Proc. 4th Int. Top. Mtg. on Nucl. Reactor Thermal Hydraulics, pp.304-311 (1989).
- [67] Burger, M. et al., "Breakup of Melt Jets as Pre-Condition for Premixing: Modeling and Experimental Verification", Nucl. Eng. Design, Vol. 155, pp.215-251 (1995).
- [68] Burger, M. et al., "Fragmentation and Film Boiling as Fundamentals in Premixing", A Multidisciplinary Int. Sem. Intense Multiphase Interaction, Santa Barbara, pp.29-55 (1995).
- [69] Burger, M. et al., "Modeling of Jet Breakup as a Key Process in Premixing", Proc. Int. Sem. on the Physics of Vapor Explosions, Tomakomai, pp.79-89 (1993).
- [70] Burger, M. et al., "Two-Phase Description of Hydrodynamic Fragmentation Processes within Thermal Detonation Waves", Trans. the ASME, Vol. 106, pp.728-734 (1984).
- [71] Cahn, J. W. and Hilliard, J. E., "Free Energy of a Nonuniform System. I. Interfacial Free Energy", J. Chem. Phys., Vol. 28(2), pp.258-267 (1958).

- [72] Cao, N. et al., "Physical Symmetry and Lattice Symmetry in the Lattice Boltzmann Method", Phys. Rev. E, Vol. 55(1), pp.R21-R24 (1997).
- [73] Carachalios, C. et al., "A Transient Two-Phase Model to Describe Thermal Detonations Based on Hydrodynamic Fragmentation", Proc. Int. Mtg. on LWR Severe Accident Evaluation, Cambridge, Massachusetts, Vol. 1, pp.6-8-1-6-8-8 (1983).
- [74] Celeta, G. P. et al., "Bubble Rising Velocity in Saturated Liquid up to the Critical Pressure", 1st European-Japanese Two-Phase Flow Group Meeting, (2000).
- [75] Chapman, R. et al., "Mitigation of Vapor Explosions in One-Dimensional Large Scale Geometry with Surfactant Coolant Additives", Proc. Int. Sem. on Vapor Explosion and Explosive Eruptions, Sendai, pp.47-58 (1997).
- [76] Chasanov, M. G. et al., "High Temperature Physical Properties of Fast Reactor Materials", J. Nucl. Material, Vol. 49, pp.129-135 (1973).
- [77] Chen, H. et al., "Recovery of the Navier-Stokes Equations Using a Lattice-gas Boltzmann Method", Phys. Rev. A, Vol. 45(8), pp.R5339-R5342 (1992).
- [78] Chen, S. and Martinez, D., "On Boundary Conditions in Lattice Boltzmann Methods", Phys. Fluids, Vol. 8(9), pp.2527-2536 (1996).
- [79] Chen, S. et al., "Lattice Boltzmann Computational Fluid Dynamics in Three Dimensions", J. Stat. Phys., Vol. 68(3/4), pp.379-400 (1992).
- [80] Chen, S. et al., "Lattice Boltzmann Model for Simulation of Magnetohydrodynamics", Phys. Rev. Lett., Vol. 67(27), pp.3776-3779 (1991).
- [81] Chen, S. et al., "Lattice Gas Automata for Flow through Porous Media", Physica D, Vol. 47, pp.72-84 (1991).
- [82] Chen, X. et al., "Experimental Simulation of Microinteractions in Large Scale Explosions", Nucl. Eng. Design, Vol. 189, pp.163-178 (1999).
- [83] Chen, X. et al., "On the Constitutive Description of the Microinteractions Concept in Steam Explosions", A Multidisciplinary Int. Sem. Intense Multiphase Interaction, Santa Barbara, pp.270-286 (1995)
- [84] Chen, Y. et al., "Heat Transfer in Lattice BGK Modeled Fluid", J. Stat. Phys., Vol. 81(1/2), pp.71-85 (1995).
- [85] Chen, Y. et al., "Plandtl Number of Lattice Bhatnagar-Gross-Krook Fluid", Phys. Fluids, Vol. 7(9), pp.2280-2282 (1995).
- [86] Chen, Y. et al., "Simulation of Shock-Interface Interaction Using a Lattice Boltzmann Model", Proc. Int. Sem. on the Physics of Vapor Explosions, Tomakomai, pp.65-69 (1993).
- [87] Chen, Y. et al., "Thermal Lattice Bhatnagar-Gross-Krook Model without Nonlinear Deviations in Mucrodynamic Equations", Phys. Rev. E, Vol. 50(4), pp.2776-2783 (1994).
- [88] Cho, D. H. and Chan, S. H., "Transient Energy Transfer by Conduction and Radiation for a Sudden Contact between Molten UO₂ and Sodium", ANL-78-34, pp.1-19 (2000).
- [89] Cho, D. H. et al., "Combined Vapor and Chemical Explosions of Metals and Water", Nucl. Eng. Des., Vol. 155, pp.405-412 (1995).

- [90] Cho, D. H. et al., "Experiments on Interactions between Zirconium-Containing Melt and Water (ZREX): Hydrogen Generation and Chemical Augmentation of Energy", Proc. OECD / CSNI Specialists Mtg. on Fuel-Coolant Interactions, Tokai-mura, Japan, Vol. 2, pp.595-608 (1997).
- [91] Cho, D. H., "Combined Vapor and Chemical Explosions of Metals and Water", Proc. Int. Sem. on the Physics of Vapor Explosions, Tomakomai, pp.157-164 (1993).
- [92] Chu, C. C. et al., "Ex-vessel Melt-Coolant Interactions in Deep Water Pool: Studies and Accident Management for Swedish BWRs", Nucl. Eng. Des., Vol. 155, pp.159-213 (1995).
- [93] Chu, C.-C. et al., "A code manual for TEXAS-V: One dimensional transient fluid model fuel-coolant interaction analysis", <http://silver.neep.wisc.edu/~NSRC/texas>.
- [94] Ciccarelli, G. and Frost, D. L., "Fragmentation Mechanisms Based on Single Drop Experiments Using Flash X-Ray Photography", Proc. 5th Int. Top. Mtg. on Nucl. Reactor Thermal Hydraulics, pp.615-626 (1995).
- [95] Ciccarelli, G. and Frost, D. L., "Fragmentation Mechanisms Based on Single Drop Steam Explosion Experiments Using Flash X-Ray Radiography", Nucl. Eng. Design, Vol. 146, pp.109-132 (1994).
- [96] Colgate, S. A. and Sigurgeirsson, T., "Dynamic Mixing of Water and Lava", Nature, Vol. 244, pp.552-555 (1973).
- [97] Corradini, M. L. et al., "FCI Experiments and Analysis: Contribution to Basic Understanding", Proc. OECD / CSNI Specialists Mtg. on Fuel-Coolant Interactions, Tokai-mura, Japan, Vol. 2, pp.609-623 (1997).
- [98] Corradini, M. L. et al., "Chemical Assisted Vapor Explosions in a Shock Tube Geometry", A Multidisciplinary Int. Sem. Intense Multiphase Interaction, Santa Barbara, pp.256-269 (1995).
- [99] Corradini, M. L. et al., "Fuel-Coolant Interactions and Vapor Explosions; Recent Results and Related Issues", NUREG/CP-0105, Vol. 2, pp.223-249 (1990).
- [100] Corradini, M. L. et al., "Vapor Explosions in Light Water Reactors: A Review of Theory and Modelling", Prog. Nucl. Energy, Vol. 22, pp.1-117 (1988).
- [101] Corradini, M. L., "Vapor Explosions: A Review of Experiments for Accident Analysis", Nucl. Safety, Vol. 32, pp.337-362 (1991).
- [102] Cranga, M. et al., "Transient Material Behaviour in CABRI 1 Experiment - Failure under Fully and Semi-Restrained Fuel Pin Conditions", Proc. Int. Fast Reactor Safety Mtg., Snowbird, Vol. 2, pp.421-430 (1990).
- [103] Cronenberg, A. W. and Benz, R., "Vapor Explosion Phenomena with respect to Nuclear Reactor Safety Assessment", NUREG/CR-0245, Tree1242 (1978).
- [104] Cronenberg, A. W. and Grolmes, M. A., "Fragmentation Modeling Relative to the Breakup of Molten UO₂ in Sodium", J. Nucl. Safety, Vol. 16(6), pp.683-700 (1975).
- [105] Cronenberg, A. W. and Tolman, E. L., "Thermal Interaction of Core Melt Debris with Three Mile Island Unit 2 Vessel Components", Nucl. Tech., Vol. 87, pp.273-282 (1989).
- [106] D'Ortona, U. et al., "Interfacial Phenomena in Boltzmann Cellular Automata", Europhys. Lett., Vol. 28(5), pp.317-322 (1994).

- [107] Darby, K. et al., Int. Conf. on Eng. of Fast Reactor for Safe and Reliable Operation, Karlsruhe, pp.898 (1972).
- [108] Davis, F. J. and Young, M. F., "Integrated fuel-coolant interaction (IFCI 6.0) code, user's manual", Technical Report NUREG / CR-6211, SAND94-0406, U. S. Nuclear Regulatory Commission (1994).
- [109] Denham, M. K. et al., "Experiments on the Mixing of Molten Uranium Dioxide with Water and Initial Comparisons with CHYMES Code Calculations", Proc. 5th Int. Top. Mtg. on Nucl. Reactor Thermal Hydraulics, pp.1667-1675 (1992).
- [110] Dhir, V. K. and Lay, J. H., "On the Mechanism of Very High Evaporative Heat Fluxes in Nucleate Boiling", A Multidisciplinary Int. Sem. Intense Multiphase Interaction, Santa Barbara, pp.125-135 (1995).
- [111] Dinh, T. N. et al., "Experimental and Analytical Studies of Melt Jet-Coolant Interactions: A synthesis", Nucl. Eng. Design, Vol. 189, pp.299-327 (1999).
- [112] Dinh, T. N. et al., "Experimental and Analytical Studies of Melt Jet-Coolant Interactions: A Synthesis", Proc. OECD / CSNI Specialists Mtg. on Fuel-Coolant Interactions, Tokai-mura, Japan, Vol. 2, pp.468-492 (1997).
- [113] Dinh, T. N. et al., "Investigation of Film Boiling Thermal Hydraulics under FCI Conditions: Results of Analyses and a Numerical Study", Nucl. Eng. Design, Vol. 189, pp.251-272 (1999).
- [114] Dullforce, T. A. et al., "Self-triggering of scale fuel-coolant interactions: Experiment", J. Phys. D, Vol. 9, pp.1295 (1976).
- [115] Eggels, J. G. M. and Somers, J. A., "Numerical Simulations of Free Convective Flow Using the Lattice-Boltzmann Scheme", Int. J. Heat and Fluid Flow, Vol. 16, pp.357-364 (1995).
- [116] Eggels, J. G. M., "Direct and Large-eddy Simulation of turbulent fluid flow using the Lattice-Boltzmann Scheme", Int. J. Heat and Fluid Flow, Vol. 17, pp.307-323 (1996).
- [117] El-Genk, M. S., "Molten Fuel-Coolant Interaction Occurring During a Severe Reactivity Initiated Accident Experiments", NUREG/CR-1900, pp.1-82 (1981).
- [118] Enger, T. and Hartman, D., Proc. of the 3rd Conf. on Liquified Natural Gas, Washington D.C. (1972).
- [119] Epstein, L. F., GEAP-3335 (1980).
- [120] Epstein, L. F., Nucl. Sci. Eng., Vol.55, pp.462 (1974)
- [121] Epstein, M. and Fauske, H. K., "A Crystallization Theory of Underwater Alminum Ignition", Proc. 5th Int. Top. Mtg. on Nucl. Reactor Thermal Hydraulics (NURETH-5), Vol. 2, pp.637-645 (1992).
- [122] Epstein, M. and Fauske, H. K., "On the Likelihood that Underwater Metal Ignition is a Vapor Phase Phenomena", Nucl. Eng. Des., Vol. 155, pp.427-443 (1995).
- [123] Epstein, M. and Hauser, G. M., "Subcooled Forced-Convection Film Boiling in the Forward Stagnation Region of a Sphere or Cylinder", Int. J. Heat Mass Transfer, Vol. 23, pp.179-189 (1980).
- [124] Epstein, M. et al., "On the Mechanism of Aluminum Ignition in Steam Explosions", Nucl. Eng. Des., Vol. 201, pp.71-82 (2000).
- [125] Epstein, M. et al., "Simultaneous Melting and Freezing in the Impingement Region of a Liquid Jet", AIChE J., Vol. 26(5), pp.743-751 (1980).

- [126] Ergun, S., "Fluid Flow through Packed Columns", Chem. Engineering Prog., Vol. 48(2), pp.89-94 (1952).
- [127] Esptein, M., "Thermal Fragmentation - A Gas Release Phenomenon", Nucl. Sci. Eng., Vol. 55, pp.462-467 (1974).
- [128] Farahat, M. M. et al., "Pool Boiling in Subcooled Sodium at Atmospheric Pressure", Nucl. Sci. Eng., Vol. 53, pp.240-254 (1974).
- [129] Farawila, Y. M. and Abdel-Khalik, S. I., "On the Calculation of Steam Explosion Conversion Ratios from Experimental Data, Nuclear Science and Engineering", Nucl. Sci. Eng., Vol. 104, pp.288-295 (1990).
- [130] Fauske, H. K., "On the Mechanism of Uranium Dioxide-Sodium Explosive Interactions", Nucl. Sci. Eng., Vol. 51, pp.95-101 (1973).
- [131] Ferreol, B. and Rothmann, D. H., "Lattice Boltzmann Simulations of Flow Through Fontainebleau Sandstone", Transport in Porous Media, Vol. 20, pp.3-20 (1995).
- [132] Fletcher, D. F. and Anderson, R. P., "A Review of Pressure-Induced Propagation Models of the Vapour Explosion Process", Prog. in Nucl. Energy, pp.137-179 (1990).
- [133] Fletcher, D. F. and Denham, M. K., "Validation of the CHYMES Mixing Model", Nucl. Eng. Des., Vol. 155, pp.85-96 (1995).
- [134] Fletcher, D. F. and Sigurdson, M., "The Effect of Coolant Viscosity on Natural Convection Film Boiling", Proc. Int. Sem. on Vapor Explosion and Explosive Eruptions, Sendai, pp.131-137 (1997).
- [135] Fletcher, D. F. and Sigurdson, M., "The Effect of Coolant Viscosity on Natural Convection Film Boiling", Nucl. Eng. Design, Vol. 189, pp.239-250 (1999).
- [136] Fletcher, D. F. and Thyagaraja, A., "A mathematical model of melt/water detonations", Appl. Math. Modelling, Vol. 13, pp.339-347 (1989).
- [137] Fletcher, D. F. and Witt, P. J., "Computational Aspects of Premixing Modeling", Nucl. Eng. Design, Vol. 189, pp.179-189 (1999).
- [138] Fletcher, D. F., "An improved mathematical model of melt/water detonations.--I. Model formulation and example results", Int. J. Heat Mass Transfer, Vol. 34, pp.2435-2448 (1991).
- [139] Fletcher, D. F., "An improved mathematical model of melt/water detonations.--II. A Study of Escalation", Int. J. Heat Mass Transfer, Vol. 34, pp.2449-2459 (1991).
- [140] Fletcher, D. F., "Propagation Investigations Using CULDESAC Model", Proc. CSNI Specialists Mtg. on Fuel-Coolant Interactions, Santa Barbara, pp.180-192 (1993).
- [141] Fletcher, D. F., "Propagation Investigations Using the CULDESAC Model", Nucl. Eng. Des., Vol. 155, pp.271-287 (1995).
- [142] Fletcher, D. F., "Steam Explosion Triggering: A Review of Theoretical and Experimental Investigations", Nucl. Eng. Des., Vol. 155, pp.27-36 (1995).
- [143] Fletcher, D. F., "Steam Explosion Triggering: A Review of Theoretical and Experimental Investigations", Proc. Int. Sem. on the Physics of Vapor Explosions, Tomakomai, pp.111-117 (1993).
- [144] Fletcher, D. F., "Technical note: Radiation Absorption During Premixing", Nucl. Eng. Design, Vol. 189, pp.435-440 (1999).

- [145] Flory, K. et al., "Molten Metal-Water Explosions", Chem. Eng. Prog., Vol. 65(12), pp.50-54 (1969).
- [146] Flost, D. L. et al., "Numerical Computation of Underwater Explosions Due to Fuel-Coolant Interactions", Proc. 5th Int. Top. Mtg. on Nucl. Reactor Thermal Hydraulics (NURETH-5), Vol. 3, pp.772-781 (1992).
- [147] Frisch, U. et al., "Lattice-Gas Automata for the Navier-Stokes Equation", Phys. Rev. Lett., Vol. 56(14), pp.1505-1508 (1986).
- [148] Frohlich, G., "Propagation of Fuel Coolant Interactions in Multi-Jet Experiments", Proc. 4th. Int. Top. Mtg. on Nucl. Reactor Thermal Hydraulics, Karlsruhe, Vol. 1, pp.282-289 (1989).
- [149] Frost, D. L. et al., "Effect of Boundary Conditions on the Propagation of a Vapor Explosion in Stratified Molten Tin/Water Systems", Nucl. Eng. Des., Vol. 155, pp.311-333 (1995).
- [150] Frost, D. L. et al., "Effect of Boundary Conditions on the Propagation of a Vapor Explosion in Stratified Molten Tin/Water Systems", Proc. OECD/CSNI Specialist Mtg. on Fuel Coolant Interactions, Santa Barbara, pp.159-172 (1993).
- [151] Frost, D. L. et al., "The Role of Confinement in the Propagation of Vapor Explosion", Proc. Int. Sem. on the Physics of Vapor Explosion, pp.128-138 (1993).
- [152] Fry, C. J. and Robinson, C. H., "Experimental Observations of Propagating Thermal Interactions in Metal/Water Systems", 4th CSNI Specialist Mtg. on Fuel-Coolant Interaction in Nucl. Reactor Safety, Bournemouth, Vol. 1, pp.329-362 (1979).
- [153] Fujishiro, T. and Fuketa, T., "NSRR Experimental Results on Fuel/Coolant Interaction During a Severe Reactivity Initiated Accident", Proc. 4th. Int. Top. Mtg. on Nucl. Reactor Thermal Hydraulics, Karlsruhe, Vol. 1, pp.297-318 (1989).
- [154] Fujishiro, T. et al., "A Study on Pressure Generation Caused by Actual Fuel Failure in the NSRR Experiment", 4th CSNI Specialist Mtg. on Fuel-Coolant Interaction in Nucl. Reactor Safety, Bournemouth, Vol. 2, pp.588-613 (1979).
- [155] Fuketa, T. and Fujishiro, T., "Generation of Destructive Forces During Fuel/Coolant Interactions under Severe Reactivity Initiated Accident Conditions", Proc. 5th Int. Top. Mtg. on Nucl. Reactor Thermal Hydraulics (NURETH-5), Vol. 3, pp.753-761 (1992).
- [156] Fuketa, T., and Fujishiro, T., "Generation of Destructive Forces during Fuel/Coolant Interactions under Severe Reactivity Initiated Accident Conditions", Nucl. Eng. Design, Vol. 146, pp.181-194 (1994).
- [157] Furukawa, H., "A Dynamic Scaling Assumption for Phase Separation, Advances in Physics, Vol. 34(6), pp.703-750 (1985).
- [158] Furutani, A. et al., "Erosion Behavior of Solid Plate by a Liquid Jet - Effect of Molten Layer -", Nucl. Eng. Design, Vol. 132, pp.153-169 (1991).
- [159] Gabor, J. D. et al., "Molten Aluminum Alloy Fuel Fragmentation Experiments", Proc. 5th Int. Top. Mtg. on Nucl. Reactor Thermal Hydraulics, pp.898-906 (1992).
- [160] Gunnerson, F. S. and Cronenberg, A. W., "A Thermodynamical Prediction of the Leidenfrost Temperature and Its Relationship to Vapor Explosion Phenomena, Bureau of Engineering Research", The University of Mexico, College of Engineering, pp.1-23 (1978).

- [161] Gunstensen, A. K. and Rothman, D. H., "A Galilean-Invariant Immiscible Lattice Gas", *Physica D*, Vol. 47, pp.53-63 (1991).
- [162] Gunstensen, A. K. and Rothman, D. H., "A Lattice-Gas Model for Three Immiscible Fluids", *Physica D*, Vol. 47, pp.47-52 (1991).
- [163] Gunstensen, A. K. and Rothman, D. H., "Lattice Boltzmann Model for Immiscible Fluids", *Phys. Rev. A*, Vol. 43(8), pp.4320-4327 (1991).
- [164] Gunstensen, A. K. and Rothman, D. H., "Lattice-Boltzmann Studies of Immiscible Two-Phase Flow Through Porous Media", *J. Geophys.Res.*, Vol. 98(B4), pp.6431-6441 (1993).
- [165] Hall, A. N., "Outline of a New Thermodynamic Model of Energetic Fuel-Coolant Interactions", *Nucl. Eng. Design*, Vol. 109, pp.407-415 (1988).
- [166] Hall, R. W. and Board, S. J., "The Propagation of Large Scale Thermal Explosions", *Int. J. Heat Mass Transfer*, Vol. 22, pp.1083-1093 (1978).
- [167] Hall, R. W. and Fletcher, D. F., "Validation of the CHYMES: Simulant Study", *Nucl. Eng. Des.*, Vol. 155, pp.97-114 (1995).
- [168] Hall, W. B., OECD/CSNI Meeting Argonne, III, (1977)
- [169] Han, S. H. and Bankoff, S. G., "Thermal Interactions of a Molten Tin Drop with Water Triggered by a Low-Pressure Shock", *Int. J. Heat Mass Transfer*, Vol. 30(3), pp.569-579 (1987).
- [170] Hardee, H. C. and Nilson, R. H., "Natural Convection in Porous Media with Heat Generation", *Nucl. Sci. Eng.*, Vol. 63(2), pp.119-132 (1977).
- [171] Hardy, J. et al., "Molecular Dynamics of a Classical Lattice Gas: Transport Properties and Time Correlation Function", *Phys. Rev. A*, Vol. 13(5), pp.1949-1961 (1976).
- [172] Harper, E. Y. et al., "On the Breakup of Accelerating Liquid Drops", *J. Fluid Mech.*, Vol. 52(3), pp.565-591 (1972).
- [173] Hasan, M. Z. et al., "Boiling Burnout during Crossflow over Cylinders, beyond the Influence of Gravity", *Trans. the ASME*, Vol. 103, pp.478-484 (1981).
- [174] Hatfield, G. W., *Mech. Eng.*, Vol. 77 (1955).
- [175] He, X. and Luo, L.-S., "A Priori Derivation of the Lattice Boltzmann Equation", *Phys. Rev. E*, Vol. 55(6), pp.R6333-R6336 (1997).
- [176] He, X. et al., "A Novel Thermal Model for Lattice Boltzmann Method in Incompressible Limit", *J. Comp. Phys.*, Vol. 146, pp.282-300 (1998).
- [177] He, X. et al., "Some Progress in Lattice Boltzmann Method Part I. Nonuniform Mesh Grids", *J. Comp. Phys.*, Vol. 129, pp.357-363 (1996).
- [178] Henry, R. E. and Fauske, H. K., "Nucleation Process in Large Scale Vapor Explosions", *J. Heat Transfer*, *Trans. ASME*, Vol. 101, pp.280-287 (1979).
- [179] Henry, R. E., "Externally Triggered Steam Explosion Experiments: Amplification or Propagation?", *Nucl. Eng. Des.*, Vol. 155, pp.37-44 (1995).
- [180] Heusener, G. et al., "The CABRI-Programmes - Motivations and Achievements", *Proc. Int. Fast Reactor*

- Safety Mtg., Snowbird, Vol. 2, pp.197-207 (1990).
- [181] Higuera, F. J. et al., "Lattice Gas Dynamics with Enhanced Collisions", *Europhys. Lett.*, Vol. 9(4), pp.345-349 (1989).
 - [182] Hofmann, P. et al., "Reactor Core Materials Interactions at Very High Temperatures", *Nucl. Tech.*, Vol. 87, pp.146-186 (1989).
 - [183] Hohmann, H. et al., "FCI Experiments in the Aluminum Oxide/Water System", *Nucl. Eng. Des.*, Vol. 155, pp.391-403 (1995).
 - [184] Hohmann, H. et al., "FCI Experiments in the Aluminum Oxide/Water Systems", Proc. OECD/CSNI Specialist Mtg. on Fuel Coolant Interactions, Santa Barbara, pp.193-203 (1993).
 - [185] Hong, S. W. et al., "Overview of KAERI Fuel-Coolant Interaction Test", Proc. Workshop on Severe Accident Research, Japan (SARJ-99) (1999).
 - [186] Hou, S. et al., "Simulation of Cavity Flow by the Lattice Boltzmann Method", *J. Comp. Phys.*, Vol. 118, pp.329-347 (1995).
 - [187] Huber, F. et al., "Experiments to the Behavior of Thermite Melt Injection into a Sodium Pool", Proc. Int. Fast Reactor Safety Mtg., Snowbird, Vol. 2, pp.407-416 (1990).
 - [188] Huber, F. et al., "Experiments with Injection of Thermite Melt into Sodium", Proc. 4th Int. Top. Mtg. on Nucl. Reactor Thermal Hydraulics, Karlsruhe, Vol. 1, pp.290-296 (1989).
 - [189] Huber, F. et al., "Experiments with Injection of Thermite Melt into Sodium", Proc. 4th Int. Top. Mtg. on Nucl. Reactor Thermal Hydraulics, pp.290-296 (1989).
 - [190] Huhtiniemi, I. et al., "Results of Recent KROTOS FCI Tests: Alumina vs. Corium Melts", Proc. OECD/CSNI Specialists Mtg. on Fuel-Coolant Interactions, Tokai-mura, Japan, pp.275-286 (1997).
 - [191] Huhtiniemi, I. et al., "Results of Recent KROTOS FCI tests: Alumina versus Corium Melts", *Nucl. Eng. Design*, Vol. 189, pp.379-389 (1999).
 - [192] Humieres, D. D and Lallemand, P., "Lattice Gas Models for 3D Hydrodynamics", *Europhys. Lett.*, Vol. 2(4), pp.291-297 (1986).
 - [193] Iida, Y. and Okuyama, K., "Effect of Ambient Pressure on the Dynamics of Bubble Formation by Fluctuation Nucleation on a Film Rapidly Heated to the Limit of Liquid Superheat", *Dynamics of Vapor Explosion~Final Report~*, pp.85-90 (1998).
 - [194] Iida, Y. et al., "Bubble Nucleation on a Film Heater Heated Extremely Rapidly up to about the Homogeneous Nucleation Temperature", Proc. Int. Sem. on the Physics of Vapor Explosions, Tomakomai, pp.47-55 (1993).
 - [195] Iida, Y. et al., "Pressure Dependency of Bubble Nucleation and Heat Transfer Behaviors When a Film Heater Immersed in Ethanol is Heated Extremely Rapidly", A Multidisciplinary Int. Sem. Intense Multiphase Interaction, Santa Barbara, pp.213-221 (1995).
 - [196] Inamuro, T. et al., "A Non-Slip Boundary Condition for Lattice Boltzmann Simulations", *Phys. Fluids*, Vol. 7(12), pp.2928-2930 (1995).
 - [197] Inamuro, T. et al., "Accuracy of the Lattice Boltzmann Method for Small Knudsen Number with Finite

- Reynolds Number”, Phys. Fluids, Vol. 9(11), pp.3535-3542 (1997).
- [198] Inamuro, T. et al., “Lattice Boltzmann Simulations of Flows in a Three-Dimensional Porous Structures”, Int. J. Numer. Meth. Fluids, Vol. 29, pp.737-748 (1999).
- [199] Inoue, A. and Bankoff, S. G., “Destabilization of Film Boiling due to Arrival of Pressure Shock (Part I: Experimental)”, J. Heat Transfer, Vol. 103, pp.459-464 (1981).
- [200] Inoue, A. and Lee, S., “Studies on Micro-Structures at Vapor-Liquid Interfaces of Film Boiling on Hot Liquid Surface at Arriving of a Shock Pressure”, Proc. OECD / CSNI Specialists Mtg. on Fuel-Coolant Interactions, Tokai-mura, Japan, Vol. 1, pp.410-426 (1997).
- [201] Inoue, A. et al., “An Analytical Model on Vapor Explosion of High Temperature Molten Metal Droplet with Water Induced by a Pressure Pulse”, Proc. 4th Int. Top. Mtg. on Nucl. Reactor Thermal Hydraulics, Karlsruhe, Vol. 1, pp.274-281 (1989).
- [202] Inoue, A. et al., “Destabilization of Film Boiling due to Arrival of Pressure Shock (Part II: Analytical)”, J. Heat Transfer, Vol. 103, pp.465-471 (1981).
- [203] Inoue, A. et al., “Experimental and Analytical Study on Vapor Explosion of Melting Heating Rod During a Severe Power Transient”, Proc. 5th Int. Top. Mtg. on Nucl. Reactor Thermal Hydraulics, pp.762-771 (1992).
- [204] Inoue, A. et al., “On the Thermal Fragmentation Mechanism of a Hot Metal Drop under a Pressure Pulse”, A Multidisciplinary Int. Sem. Intense Multiphase Interaction, Santa Barbara, pp.223-234 (1995).
- [205] Inoue, A. et al., “Studies on Transient Film Boiling Heat Transfer from Thin Wires Penetrating through Liquid Interface”, Proc. Int. Sem. on Vapor Explosion and Explosive Eruptions, Sendai, pp.123-130 (1997).
- [206] Inoue, A. et al., “Transient Film Boiling under Transient Conditions Related to Vapor Explosion (Effects of Transient Flow and Fragmentation under a Shock Pressure)”, Nucl. Eng. Des., Vol. 155, pp.55-66, (1995).
- [207] Inoue, A. et al., “Transient Film Boiling under Transient Conditions Related to Vapor Explosions (Effects of Transient Flow and Fragmentation under a Shock Pressure)”, Proc. Int. Sem. on the Physics of Vapor Explosions, Tomakomai, pp.27-38 (1993).
- [208] Ip, B. M. et al., “An Experimental Investigation of the Effects of Polymeric Additives on the Likelihood and Severity of Steam Explosions”, Proc. 5th Int. Top. Mtg. on Nucl. Reactor Thermal Hydraulics (NURETH-5), pp.907-915 (1992).
- [209] Ito, T. et al., “Thermal Interaction of Molten Metal with Water in Powder-Making Process”, Proc. Int. Sem. on Vapor Explosion and Explosive Eruptions, Sendai, pp.111-122 (1997).
- [210] Ivins, R. O. et al., ANL-7399 (1967).
- [211] J. P. ホールマン, 「伝熱工学（上）、（下）」, 丸善出版 (1936).
- [212] Jacobs, H. and Meyer, L., “Highly Transient and Intense Multiphase Interactions in the QUEOS Premixing Experiments”, Proc. Int. Sem. on Vapor Explosion and Explosive Eruptions, Sendai, pp.253-262 (1997).
- [213] Jacobs, H. et al., “Constitutive Relations for Multiphase Flow Modeling”, Proc. OECD / CSNI Specialists Mtg. on Fuel-Coolant Interactions, Tokai-mura, Japan, Vol. 1, pp.205-218 (1997).

- [214] Jacobs, H. et al., "Multifield Simulations of Premixing Experiments", A Multidisciplinary Int. Sem. Intense Multiphase Interaction, Santa Barbara, pp.56-69 (1995).
- [215] Jacobs, H., "Propagation of Vapor Explosions Due to Explosive Boiling", Proc. Int. Sem. on the Physics of Vapor Explosions, Tomakomai, pp.118-127 (1993).
- [216] Kaiser, A. et al., "Melt Water Interaction Tests (PREMIX Tests PM10 and M11)", Proc. OECD / CSNI Specialists Mtg. on Fuel-Coolant Interactions, Tokai-mura, Japan, Vol. 2, pp.646-657 (1997).
- [217] Kandoff, L. P. et al., "From automata to fluid flow: Comparisons of simulations and theory", Phys. Rev. A, Vol. 40(8), pp.4527-4541 (1989).
- [218] Kato, M. et al., "Fuel Coolant Interaction Tests using UO₂ Corium under Ex-Vessel Conditions", Proc. Workshop on Severe Accident Research held in Japan (SARJ-98), pp.304-309 (1998).
- [219] Katz, D. L. and Slepcevich, C. M., Hydrocarbon Processing, November, pp.240 (1971).
- [220] Kayser, G. and Berthoud, G., "Fuel Coolant Interactions in SCARABEE", Int. Conf. Design and Safety of Advanced Nucl. Power Plants, pp.40.2-1-40.2-7 (1992).
- [221] Kim, B. and Corradini, M. L., "Modeling of Small-Scale Single Droplet Fuel/Coolant Interactions", Nucl. Sci. Eng., Vol. 98, pp.16-28 (1988).
- [222] Kim, H. et al., "Single Droplet Vapor Explosion: Effect of Coolant Viscosity", Proc. 4th. Int. Top. Mtg. on Nucl. Reactor Thermal Hydraulics, Karlsruhe, Vol. 1, pp.261-267 (1989).
- [223] Kolev, N. I., "The code IVA3 for modeling of transient three-phase flows in complicated 3D geometry", Kerntechnik, Vol. 58(3), pp. 147-156 (1993).
- [224] Kolev, N. I., "IVA4 Analysis of the FARO L14 Experiment", Proc. Int. Sem. on Vapor Explosion and Explosive Eruptions, Sendai, pp.263-272 (1997).
- [225] Kolev, N. I., "Three Fluid Modeling with Dynamic Fragmentation and Coalescence - Fiction or Daily Practice? -", Proc. Int. Sem. on Vapor Explosion and Explosive Eruptions, Sendai, pp.273-296 (1997).
- [226] Kolev, N. I., "Verification of the IVA4 Film Boiling Model with the Data Base of Liu and Theofanous", Proc. OECD / CSNI Specialists Mtg. on Fuel-Coolant Interactions, Tokai-mura, Japan, Vol. 2, pp.699-721 (1997).
- [227] Kondo, Sa. et al., "Experimental Study on Simulated Molten Jet-Coolant Interactions", Nucl. Eng. Des., Vol. 155, pp.73-84 (1995).
- [228] Kondo, Sa. et al., "Fuel-Coolant Interaction Studies at PNC Relevant to Fast Reactor Safety", Proc. Int. Sem. on the Physics of Vapor Explosion, pp.96-109 (1993).
- [229] Koshizuka, S. and Oka, Y., "Development of a Particle Method for Calculationg Fragmentation of Incompressible Viscous Fluid", A Multidisciplinary Int. Sem. Intense Multiphase Interaction, Santa Barbara, pp.145-158 (1995).
- [230] Koshizuka, S. and Oka, Y., "Effect of Spontaneous Nucleation on Melt Fragmentation in Vapor Explosions", Proc. Int. Sem. on Vapor Explosion and Explosive Eruptions, Sendai, pp.185-192 (1997).
- [231] Koshizuka, S. et al., "Numerical Analysis of Fragmentation Mechanisms in Vapor Explosions", Proc. OECD / CSNI Specialists Mtg. on Fuel-Coolant Interactions, Tokai-mura, Japan, Vol. 2, pp.722-732

- (1997).
- [232] Koshizuka, S. et al., "Numerical Analysis of Fragmentation Mechanism in Vapor Explosions", Nucl. Eng. Design, Vol. 189, pp.423-433 (1999).
- [233] Kowal, M. G. et al., "An Experimental Investigation of the Effects of Surfactants on the Severity of Vapor Explosions", Nucl. Sci. Eng., Vol. 115, pp.185-192 (1993).
- [234] Kuan, P. and Buescher, B. J., "Ignition Threshold of Molten Aluminum in Water", AIChE Symp. Ser., Vol. 87(283), pp.177-181 (1991).
- [235] Lienhard, J. H., "Correlation for the Limiting Liquid Superheat", Chem. Eng. Sci., Vol. 31, pp.847-849 (1976).
- [236] Lifshitz, I. M. and Slyozov V. V., "The Kinetics of Precipitation from Supersaturated Solid Solutions", J. Phys. Chem. Solids, Vol. 19(1), pp.35-50 (1961).
- [237] Lipinski, R. J., "A Coolability Model for Postaccident Nuclear Reactor Debris", Nucl. Tech., Vol. 65, pp.53-66 (1984).
- [238] Lipsett, S. G., Fire Tech. 2-118 (1966)
- [239] Livolant, M. et al., "SCARABEE: A Test Reactor and Programme to Study Fuel Melting and Propagation in Connexion with Local Faults. Objectives and Results", Proc. Int. Fast Reactor Safety Mtg., Snowbird, Vol. 2, pp.177-186 (1990).
- [240] Lomperski, S. and Corradini, M. L., "Single Droplet Lithium-Water Interactions", Proc. 5th Int. Top. Mtg. on Nucl. Reactor Thermal Hydraulics (NURETH-5), Vol. 3, pp.1104-1110 (1992).
- [241] Long, G., "Explosions of Molten Metals in Water - Cause and Prevention", Metals Prog., Vol. 71, pp.107-112 (1957).
- [242] Lucas, G. E. et al., "An Assessment of Steam-Explosion-Induced Containment Failure Part IV: Impact Mechanics, Dissipation and Vessel Head Failure", Nucl. Sci. Eng., Vol. 97, pp.316-326 (1987).
- [243] Magallon, D. and Hohmann, H., "Energetic Event in Fuel-Coolant Interaction Test FARO L-33", 9th Int. Conf. on Nucl. Eng. (ICON-E-9), pp.1-8 (2001).
- [244] Magallon, D. and Hohmann, H., "Experimental Investigation of 150-kg-scale Corium Melt Jet Quenching in Water", Nucl. Eng. Des., Vol. 177, pp.321-337 , (1997).
- [245] Magallon, D. and Hohmann, H., "High Pressure Corium Melt Quenching Tests in FARO", Proc. OECD/CSNI Specialist Mtg. on Fuel Coolant Interactions, Santa Barbara, pp.1-13 (1992).
- [246] Magallon, D. and Hohmann, H., "High Pressure Corium Melt Quenching Test I FARO", Nucl. Eng. Des., Vol. 155, pp.253-270 (1995).
- [247] Magallon, D. and Huhtiniemi, I., "Corium Melt Quenching Tests at Low Pressure and Subcooled Water in FARO", 9th Int. Top. Mtg. on Nucl. Reactor Thermal Hydraulics (NURETH-9), San Francisco, Log No. 270 (1999).
- [248] Magallon, D. et al., "Lessons Learnt from FALO/TERMOS Corium Melt Quenching Experiments", Proc. OECD/CSNI Specialists Mtg. on Fuel-Coolant Interactions, Tokai-mura, Japan, pp.431-446 (1997).
- [249] Magallon, D. et al., "Lessons Learnt from FALO/TERMOS Corium Melt Quenching Experiments", Nucl.

Eng. Design, Vol. 189, pp.223-238 (1999).

- [250] Magallon, D. et al., "Pouring of 100kg-scale Molten UO₂ into Sodium", Nucl. Tech., Vol. 98, pp.79-90 , (1992).
- [251] Magallon, D. et al., "Pouring of 100kg-scale Molten UO₂ into Sodium", Nucl. Reactor Safety, Vol. 98, pp.79-90 (1992).
- [252] Maier, R. S. et al., "Boundary Conditions for Lattice Boltzmann Method", Phys. Fluids, Vol. 8(7), pp.1788-1801 (1996).
- [253] Marshall, B. W. and Beck, D. F., "The Coarse Mixing of Boiling and Isothermal Jets", SAND87-2455C (1987).
- [254] Marshall, B. W. and Berman, M., "An Experimental Study of Isothermal and Boiling Liquid Jets", 14th Water Reactor Safety Information Mtg., pp.293-317 (1986).
- [255] Marshall, B. W. et al., "Recent Intermediate-Scale Experiments on Fuel-Coolant Interactions in an Open Geometry (EXO-FITS)", SAND85-1615C (Proc. Int. ANS/ENS Top. Mtg. on Thermal Reactor Safety), Vol. 1, pp.2-5-1-2-5-8 (1986).
- [256] Maruyama, Y. et al., "Coolability of Molten Core in Containment", Int. Conf. Design and Safety of Advanced Nucl. Power Plants, pp.23.5-1-23.5-6 (1992).
- [257] Matsukuma, Y. et al., "Lattice Gas Automata Simulations of Flow through Porous Media", Proc. the 9th Int. Topical Meeting on Nuclear Reactor Thermal Hydraulics (1999).
- [258] Matsukuma, Y. et al., "Lattice Gas Automata Simulations of Flow through Porous Media", Proc. 9th Int. Top. Mtg. on Nucl. Thermal Hydraulics, Log No. 169, pp.1-7 (1999).
- [259] Matsumura, K. and Nariai, H., "Experimental Study on the Base Triggered Spontaneous Vapor Explosions for Molten Tin-Water System", Proc. Int. Sem. on Vapor Explosion and Explosive Eruptions, Sendai, pp.27-32 (1997).
- [260] Matsumura, K. and Nariai, H., "Self Triggering Mechanism of Vapor Explosions for the Large-Scale Experiments Involving Fuel Simulant Melt", Nucl. Sci. Tech., Vol. 34(3), pp.248-255 (1997).
- [261] Matsumura, K. and Nariai, H., "Self Triggering Mechanism of Vapor Explosions for the Molten Tin and Water System", Nucl. Sci. Tech., Vol. 33(4), pp.298-306 (1996).
- [262] Matsumura, K. and Nariai, H., "The Occurrence Condition of Spontaneous Vapor Explosions", Int. Conf. on Nucl. Eng., Vol. 1, pp.325-332 (1996).
- [263] Matsumura, K. and Nariai, H., "Thermal Interaction Zone of Vapor Explosion with Tin-Water Drop Experiment", Proc. 4th Int. Top. Mtg. on Nucl. Reactor Thermal Hydraulics, pp.11-A-1-11-A-6 (1994).
- [264] Matsumura, K. et al., "Effect of Ethanol Addition on the Self-Triggering of Tin-Water Steam Explosion", Proc. ASME/JSME Thermal Eng., pp.187-192 (1995).
- [265] Matsumura, K., Nariai, H. and Sakurai, M., "Thermal Interaction Zone and Self-Triggering Mechanism of Tin-Water Systems", A Multidisciplinary Int. Sem. Intense Multiphase Interaction, Santa Barbara, pp.117-122 (1995).
- [266] McNamara, G. R. and Zanetti, G., "Use of the Boltzmann Equation to Simulate Lattice-Gas Automata",

- Phys. Rev. Lett., Vol. 61(20), pp.2332-2335 (1988).
- [267] McNamara, G. R. et al., "Stabilization of Thermal Lattice Boltzmann Model", J. Stat. Phys., Vol. 81(1/2), pp.395-408 (1995).
- [268] Medhekar, S. et al., "Integrated Analysis of Steam Explosions", Proc. 4th Int. Top. Mtg. on Nucl. Reactor Thermal Hydraulics, Karlsruhe, Vol. 1, pp.319-326 (1989).
- [269] Medhekar, S. et al., "Triggering and Propagation of Steam Explosions", Nucl. Eng. Design, Vol. 126, pp.41-49 (1991).
- [270] Mei, R. and Shyy, W., "On the Finite Difference-Based Lattice Boltzmann Method in Curvilinear Coordinates", J. Comp. Phys., Vol. 143, pp.426-448 (1998).
- [271] Meignen, R. and Berthoud G., "Fragmentation of Molten Fuel Jets", Proc. Int. Sem. on Vapor Explosion and Explosive Eruptions, Sendai, pp.83-99 (1997).
- [272] Meyer, L., "QUEOS, an Experimental Investigation of the Premixing Phase with Hot Spheres", Nucl. Eng. Design, Vol. 189, pp.191-204 (1999).
- [273] Mishima, K. et al., "Visualization Study of Molten Metal-Water Interaction by Using Neutron Radiography", Proc. Int. Sem. on Vapor Explosion and Explosive Eruptions, Sendai, pp.101-109 (1997)
- [274] Mishima, K. et al., "Visualization Study of Molten Metal-Water Interaction by Using Neutron Radiography", Nucl. Eng. Design, Vol. 189, pp.391-403 (1999).
- [275] Mitchell, D. E. and Corradini, M. L., "Intermediate Scale Steam Explosion Phenomena: Experiments and Analysis", NUREG/CR-2145, SAND81-012 (1981).
- [276] Mitchell, D. E. and Evans, N. A., "Steam Explosion Experiments at Intermediate Scale: FITSB Series", NUREG/CR-3983 (1986).
- [277] Mitchell, D. E. and Evans, N. A., "Steam Explosion Experiments at Intermediate Scale: FITSB Series", NUREG/CR-3983 (1986).
- [278] Mohammed, S. M. and Kazimi, M. S., "Hydrodynamics of Degraded Core Cooling", Nucl. Eng. Design, Vol. 71, pp.33-43 (1982).
- [279] Mori, Y. H. et al., "Vaporization of Hydrate-Forming Liquid Drops Superheated in Liquid Water - Effect of Clathrate-Hydrate Shells Encapsulating Drops", Proc. Int. Sem. on Vapor Explosion and Explosive Eruptions, Sendai, pp.161-168 (1997).
- [280] Morita, K. et al., "SIMMER-III Applications to Fuel-Coolant Interactions", Nucl. Eng. Design, Vol. 189, pp.337-357 (1999).
- [281] Morita, K. et al., "SIMMER-III: Applications to Fuel-Coolant Interactions", Proc. OECD / CSNI Specialists Mtg. on Fuel-Coolant Interactions, Tokai-mura, Japan, Vol. 2, pp.785-803 (1997)
- [282] Moriyama, K. et al., "ALPHA Visual Data Collection STX005-025: Melt Drop Steam Explosion Experiments", JAERI-DATA/CODE 99-017 (1999).
- [283] Moriyama, K. et al., "Study of premixing phase of steam explosion with jasmine code in ALPHA program", Proc. of 4th Int. Conf. on Nucl. Eng., New Orleans, Vol. 1B, pp.903-915 (1996).
- [284] Moriyama, K. et al., "Three-Component Melt Jet Breakup Model for FCI Analysis", Proc. Workshop on

- Severe Accident Research, Japan (SARJ-99) (1999).
- [285] Moriyama, K. et al., "Three-component melt jet breakup model for FCI analysis", Proc. of Workshop on Severe Accident Research, Japan (SARJ-99), Tokyo (To be published as JAERI-Conf) (1999).
- [286] Nadiga, B. T. and Sturtevant, B., "Shock Structure in a Nine-Velocity Gas", Physica D, Vol. 73, pp.205-216 (1994).
- [287] Nagasaka, H. et al., "COTELS Project (1): Overview of Project to Study FCI and MCCI during Severe Accident", OECD Workshop on Ex-Vessel Debris Coolability, November 1999 (to be published).
- [288] Nagasaka, H. et al., "COTELS Project (3): Ex-vessel Debris Cooling Tests", OECD Workshop on Ex-Vessel Debris Coolability, November 1999 (to be published).
- [289] Nannelli, F. and Succi, S., "The Lattice Boltzmann Equation on Irregular Lattices", J. Stat. Phys., Vol. 68(3/4), pp.401-407 (1992).
- [290] Nelson, L. S. and Duda, P. M., "Steam Explosion Experiments with Single Drops of Iron Oxide Melted with a CO₂ Laser", High Temp. - High Pres., Vol. 14, pp.259-281 (1982).
- [291] Nelson, L. S. and Guay, K. P., "Suppression of Steam Explosions in Tin and Fe-Al₂O₃ Melts by Increasing the Viscosity of the Coolant", High Temp. - High Pres., Vol. 18, pp.107-111 (1986).
- [292] Nelson, L. S. et al., "Photographic Evidence for the Mechanism of Fragmentation of a Single Drop of Melt in Triggered Steam Explosion Experiments", J. Non-Equilib. Thermodyn., Vol. 13, pp.27-55 (1988).
- [293] Nelson, L. S. et al., "The Triggering of Steam Explosions of Single Drops of Pure and Alloyed Molten Aluminum", Trans. ANS, Vol. 61, pp.458-459 (1991).
- [294] Nelson, L. S. et al., "Thermal- and Ignition-Type Steam Explosions of Single Drops of Molten Aluminum", Trans. ANS, Vol. 63, pp.378-379 (1991).
- [295] Nelson, L. S., "Steam Explosions of Single Drops of Pure and Alloyed Molten Aluminum", Nucl. Eng. Des., Vol. 155, pp.413-425 (1995).
- [296] Newman, R. N. et al., Proc. of Liquid Alkali Metals, Nottingham, pp.85 (1973)
- [297] Nigmatulin, B. I. et al., "Breakup of Liquid Jets in Film Boiling", Proc. Int. Sem. on the Physics of Vapor Explosions, Tomakomai, pp.90-95 (1993).
- [298] Niimura, H., "Lattice-Gas Model with Wetness Control for Various Deformable Microstructures", Comp. Phys. Comm., pp.145-157 (2000).
- [299] Noble, D. R. et al., "A Consistent Hydrodynamic Boundary Condition for the Lattice Boltzmann Method", Phys. Fluids, Vol. 7(1), pp.203-209 (1995).
- [300] Ochiai, M., and Bankoff, S. G., "Liquid-Liquid Contact in Vapor Explosions", Proc. Int. Mtg. on Fast Reactor Safety and Related Physics, pp.1843-1851 (1976).
- [301] Oh, M. D. and Corradini, M. L., "A Propagation/Expansion Model for Large Scale Vapor Explosions", Nucl. Sci. Tech., Vol. 95, pp.225-240 (1987).
- [302] Ohashi, H. et al., "Simulation of Shock-Interface Interaction Using a Lattice Boltzmann Model", Nucl. Eng. Des., Vol. 155, pp.67-71 (1995).
- [303] Ohashi, H. et al., "Simulations of the Coarse Mixing Process of the Vapor Explosion Using a

- Multi-Component Model”, A Multidisciplinary Int. Sem. Intense Multiphase Interaction, Santa Barbara, pp.70-78 (1995).
- [304] Okkonen, T., “Film Boiling on a Vertical High-Temperature Surface: Focusing on Melt Jet-Water Interactions”, Nucl. Eng. Design, Vol. 189, pp.273-297 (1999).
- [305] Okuyama, M. and Abe, Y., “Measurement of Velocity and Temperature Distribution in a Highly Porous Medium, J. Porous Media”, Vol. 3(3), pp.193-206 (2000).
- [306] Olson, J. F. and Rothman, D. H., “Three-Dimensional Immiscible Lattice Gas: Application to Sheared Phase Separation”, J. Statistical Physics, Vol. 81, pp.199-222 (1995).
- [307] Olson, J. F. and Rothman, D. H., “Two-Fluid Flow in Sedimentary Rock: Simulation, Transport and Complexity”, J. Fluid Mech., Vol. 341, pp.343-370 (1997).
- [308] Orozco, J. and Francisco, H., “Free Convection Film Boiling Heat Transfer From a Rotating Surface”, J. Heat Transfer, Vol. 114, pp.695-702 (1992).
- [309] Ostensen, R. W. and Lipinski, R. J., “Technical Notes: A Particle Bed Dryout Model Based on Flooding”, Nucl. Sci. Eng., Vol. 79, pp.110-113 (1981).
- [310] Park, H. S. et al., “Vapor Explosion Escalation/Propagation Experiments and Possible Fragmentation Mechanisms”, Proc. Int. Sem. on the Physics of Vapor Explosions, pp.187-196 (1993).
- [311] Park, I. K. and Park, G. C., “Numerical and Experimental Investigations on Limit of Vapor Explosion Work”, Proc. Int. Sem. on the Physics of Vapor Explosions, Tomakomai, pp.165-174 (1993).
- [312] Patel, P. D. and Theofanous T. G., “Shock Wave Induced Fragmentation in Liquid/Liquid and Multiphase Systems”, 2nd CSNI Specialist Meeting on Fuel-Coolant Interactions and Vapor Explosions, pp.1-32 (1978).
- [313] Patel, P. D. and Theofanous, T. G., “Hydrodynamic Fragmentation of Drops, J. Fluid Mech.”, Vol. 103, pp.207-223 (1981).
- [314] Peckover, R. S. et al., “Fuel-Coolant Interaction in Submarine Vulcanism”, Nature, Vol. 245, pp.307-308 (1973).
- [315] Peppler, W. and Will, H., “Material Redistribution in Failing Bundle Structures under Simulated Severe FBR Accident Conditions”, Nucl. Eng. Design, Vol. 126, pp.403-412 (1991).
- [316] Picchi, S. and Berthoud, G., “MC3D Modeling of Stratified Explosion”, Proc. Workshop on Severe Accident Research held in Japan (SARJ-98), pp.370-375 (1998).
- [317] Pilch, M. and Erdman, C. A., “Use of Breakup Time Data and Velocity History Data to Predict the Maximum Size of Stable Fragments for Acceleration-induced Breakup of a Liquid Drop”, Int. J. of Heat Multi-phase Flow, Vol. 13(6), pp.741-757 (1987).
- [318] Powers, D. A., “Erosion of Steel Structure by High-Temperature Melts”, Nucl. Sci. Eng., Vol. 88, pp.357-366 (1984).
- [319] Qian, Y. H. et al., “Lattice BGK Models for Navier-Stokes Equation”, Europhys. Lett., Vol. 17(6), pp.479-484 (1992).
- [320] Ranger, A. A. and Nicholls, J. A., “Aerodynamics Shattering of Liquid Drops”, AIAA J., Vol. 7(2),

pp.285-290 (1969).

- [321] Reed, A. W., "A Mechanistic Explanation of Channels in Debris Bed", J. Heat Transfer, Trans. ASME, Vol. 108, pp.125-131 (1986).
- [322] Reil, K. O. and Young, M. F., "Prompt Burst Energetics (PBE) Studies", 4th CSNI Specialist Mtg. on Fuel-Coolant Interaction in Nucl. Reactor Safety, Bournemouth, Vol. 2, pp.570-587 (1979)
- [323] Rothman, D. H. and Zaleski, S., "Lattice Gas Cellular Automata ", Cambridge Univ.Press (1997)
- [324] Rothman, D. H. et al., "Immiscible Cellular Automaton Fluids", J. Statistical Physics, Vol. 52, pp.1119-1127 (1988).
- [325] Rothman, D. H. et al., "Immiscible Cellular Automaton Fluids", Lattice Gas Methods for Partial Differential Equations, pp.275-281 (1990).
- [326] Rothman, D. H., "Cellular-Automaton Fluids: A Model for Flow in Porous Media", Geophys., Vol. 53(4), pp.509-518 (1988).
- [327] Rothman, D. H., "Macroscopic Laws for Immiscible Two-Phase Flow in Porous Media: Results from Numerical Experiments", J. Geophys.Res., Vol. 95(B6), pp.8663-8674 (1990).
- [328] Rothmann, D. H. and Zaleski, S., "Lattice gas models of phase separation: interfaces, phase transitions and multiphase flow", Rev. Modern Phys., Vol. 66(4), pp.1417-1479 (1994).
- [329] Sainson, J. et al., "Propagation of Vapor Explosion in a Stratified Geometry Experiments with Liquid Nitrogen and Water", Proc. OECD/CSNI Specialist Mtg. on Fuel Coolant Interactions, Santa Barbara, pp.148-158 (1993).
- [330] Saito, M. et al., "Experimental Study on Penetration Behaviors of Water Jet into Freon-11 and Liquid Nitrogen", ANS Proc. National Heat Transfer Conf., Houston, July 24-27, 1988, Vol. 3, pp.173-183 (1988).
- [331] Saito, M. et al., "Melting Attack of Solid Plates by a High Temperature Liquid Jet - Effect of Crust Formation -", Nucl. Eng. Design, Vol. 121, pp.11-23 (1990).
- [332] Sakai, T. et al., "Development of the Mechanistic Simulation Code for Vapor Explosions: CHAMP/VE", Proc. Int. Sem. on Vapor Explosion and Explosive Eruptions, Sendai, pp.169-175 (1997).
- [333] Sakaki, I. et al., "Ex-Vessel Debris Coolability Test using UO₂ Mixture under AM Conditions", Proc. Workshop on Severe Accident Reseach held in Japan (SARJ-98), pp.310-314 (1998).
- [334] Sallac, J. A., Pulp and Paper Magazine of Canada, Vol. 56, pp.114 (1955).
- [335] Sato, K. et al., "Melting Attack of Solid Plates by a High Temperature Liquid Jet [II] - Erosion Behavior by a Molten Metal Jet -", Nucl. Eng. Design, Vol. 132, pp.171-186 (1991).
- [336] Sawada, T. and Ninokata, H., "Validation of FCI Evaluation Method under Severe Core Accidents in Fast Breeder Reactors", Proc. Int. Sem. on Vapor Explosion and Explosive Eruptions, Sendai, pp.245-251 (1997).
- [337] Schins, H. and Gurnerson, F. S., "Boiling and Fragmentation Behavior during Fuel-Sodium Interactions", Nucl. Eng. Design, Vol. 91, pp.221-235 (1986).
- [338] Schins, H., "On the Surface Tension of Liquid UO₂", J. Nucl. Material, Vol. 78, pp.215-216 (1978)

- [339] Schnider, J. P. et al., "Breakup of Metal Jets Penetrating a Volatile Liquid", Proc. 5th Int. Top. Mtg. on Nucl. Reactor Thermal Hydraulics, pp.437-449 (1992).
- [340] Sha, W. T. and Waltar, A. E., "An Integrated Model for Analyzing Disruptive Accidents in Fast Reactors", Nucl. Sci. Eng., Vol. 44, pp.135-156 (1971).
- [341] Shan, X. and Chen, H., "Lattice Boltzmann Model for Simulating Flows with Multiple Phases and Components", Phys. Rev. E, Vol. 47(3), pp.1815-1819 (1993).
- [342] Shan, X. and Doolen, G., "Multicomponent Lattice Boltzmann Model with Interparticle Interaction", J. Stat. Phys., Vol. 81(1/2), pp.379-393 (1995).
- [343] Shan, X., "Simulation of Rayleigh-Benard Convection Using A Lattice Boltzmann Method", Phys. Rev. E, Vol. 55(3), pp.2780-2788 (1997).
- [344] Sharon, A. and Bankoff, S. G., "Propagation of Shock Wave through a Fuel/Coolant Mixture; Part A Boundary Layer Stripping Mechanism", North Western University 1851, pp.1-57 (1978).
- [345] Sharon, A. and Bankoff, S. G., "Propagation of Shock Wave through a Fuel/Coolant Mixture; Part B Taylor Instability", North Western University 1851, pp.1-19 (1978).
- [346] Sharon, A. and Bankoff, S.G., "On the Existence of Steady Supercritical Plane Thermal Detonations", Int. J. Heat and Mass Transfer, Vol. 24(10), pp.1561-1572 (1981).
- [347] Shoji, M. and Takagi, N., "An Experimental Study of Small-Scale Vapor Explosions for Molten Tin Dropped into Water", Bulletin of JSME, Vol. 26(215), pp.791-796 (1983).
- [348] Shoji, M. and Takagi, N., "Small-Scale Vapor Explosions on a Surface of Stationary Molten Tin Cooled by Flowing Water", Bulletin of JSME, Vol. 27(228), pp.1152-1158 (1984).
- [349] Shoji, M. and Takagi, N., "Thermal Interaction When a Cold Volatile Liquid Droplet Impinges on a Hot Liquid Surface", Bulletin of JSME, Vol. 29(250), pp.1183-1187 (1986).
- [350] Shoji, M. and Witte, L. C., "The Influence of Surface Conditions and Subcooling on Film-Transition Boiling", Experimental Thermal and Fluid Science, Vol. 3, pp.280-290 (1990).
- [351] Shoji, M. et al., "Pressure Generation by Rapid Heating of a Metal Wire in Water", A Multidisciplinary Int. Sem. Intense Multiphase Interaction, Santa Barbara, pp.201-206 (1995).
- [352] Shoji, M., "Phenomenology and Sequential Process of Small-Scale Vapor Explosions", Proc. Int. Sem. on the Physics of Vapor Explosions, Ohji, pp.39-46 (1993).
- [353] Shoji, M., "Phenomenology and Sequential Process of Small-Scale Vapor Explosions - Transient Boiling, Vapor Film Collapse, and Liquid Superheat -", Proc. Int. Sem. on the Physics of Vapor Explosions, Tomakomai, pp.39-46 (1993).
- [354] Sienicki, K. K. et al., "Analysis of Melt Arrival Conditions on the Lower Head in US LWR Configurations", Proc. 5th Int. Top. Mtg. on Nucl. Reactor Thermal Hydraulics (NURETH-5), Vol. 2, pp.450-460 (1992).
- [355] Siggia, E. D., "Late Stages of Spinoidal Decomposition in Binary Mixtures", Phys. Rev., Vol. 20(2), pp.595-605 (1979).
- [356] Simpkins, P. G. and Bales, E.L., "Water-Drop Response to Sudden Accelerations", J. Fluid Mech., Vol.

- 55(4), pp.629-639 (1972).
- [357] Skelton, W. T. W. et al., "Effect of Boric Acid on the Severity of Vapor Explosions in Pure Water and Surfactant Solutions", Nucl. Eng. Des., Vol. 155, pp.359-368 (1995).
- [358] Spalding, O. B., "Melting on Nuclear-Reactor Thermal Hydraulics", ANS, pp.1979-2023 (1980)
- [359] Spencer, B. W. et al., "Fragmentation and Quench Behavior of Corium Melt Streams in Water", ANL-93-32, pp.1-219 (1994).
- [360] Spencer, B.W. et al., "Fuel-Sodium Thermal Interactions in the CAMEL TOP Safety Tests, 4th CSNI Specialist Mtg. on Fuel-Coolant Interaction in Nucl. Reactor Safety", Bournemouth, Vol. 2, pp.551-569 , (1979).
- [361] Spencer, B.W. et al., "Hydrodynamics and Heat Transfer Aspects of Corium-Water Interactions", EPRI NP-5127 Project 1931-2. , (1987).
- [362] Sterling, J. D. and Chen, S., "Stability Analysis of Lattice Boltzmann Methods", J. Comp. Phys., Vol. 123, pp.196-206 (1996).
- [363] Stevens, J. W. and Witte, L. C., "Destabilization of Vapor Film Boiling around Spheres", Int. J. Heat Mass Transfer, Vol. 16, pp.669-678 (1973).
- [364] Storr, G. J. and Behnia, M., "Toward an Understanding of the Spontaneous Base-Trigger Phenomenon in Vapour Explosions", Proc. Int. Sem. on Vapor Explosion and Explosive Eruptions, Sendai, pp.17-26 (1997).
- [365] Struwe, D. and Wolff, J., "Interpretation of Mechanical Energy Releases Deduced from Post-Failure Sodium Expulsions Observed in CABRI-I Experiments", Proc. Int. Fast Reactor Safety Mtg., Snowbird, Vol. 2, pp.413-420 (1990).
- [366] Stubos, A. K. and Buchlin, J.-M., "Modeling of Vapor Channeling Behavior in Liquid-Saturated Debris Beds", Trans. ASME, Vol. 110, pp.968-972 (1988).
- [367] Sugimoto, J. et al., "Fuel-Coolant Interaction Experiments in ALPHA Program", Proc. 5th Int. Top. Mtg. on Nucl. Reactor Thermal Hydraulics, pp.890-897 (1992).
- [368] Sugiyama, K. et al., "The Effect of Latent Heat in Crusted Melts on Explosive Interaction", Proc. Int. Sem. on Vapor Explosion and Explosive Eruptions, Sendai, pp.41-46 (1997).
- [369] Sugiyama, K. et al., "Thermal Interaction in Crusted Melt Jets with Large-Scale Structures", Nucl. Eng. Design, Vol. 189, pp.329-336 (1999).
- [370] Swedish, M. J. et al., "Surface Ablation in the Impingement Region of a Liquid Jet", AIChE J., Vol. 25(4), pp.630-638 (1979).
- [371] Swift, D. L. and Pavlik , J., ANL-7125, pp.187 (1966)
- [372] Swift, M. R. et al., "Lattice Boltzmann Simulations Nonlinear Fluids", Phys. Rev. E, Vol. 75(5), pp.830-833 (1995).
- [373] Swift, M. R. et al., "Lattice Boltzmann Simulations of Liquid-gas and Binary Fluid Systems", Phys. Rev. E, Vol. 54(5), pp.5041-5052 (1996).
- [374] Takahashi, R. and Matsukuma, Y., "Cellular Automaton Model for Fluid Motion", Supercomputing '95 San

Diego (1995).

- [375] Takashima, T. and Iida, Y., "Destabilization of Vapor Film around Hemispherical Metal Surface when External Pressure Wave is Supplied", Dynamics of Vapor Explosion ~Final Report~, pp.77-83 (1998).
- [376] Theofanous, T. G. and Yuen, W. W., "The Probability of Alpha-Mode Containment Failure", Nucl. Eng. Des., Vol. 155, pp.459-473 (1995).
- [377] Theofanous, T. G. et al., "Lower Head Integrity under Steam Explosion Loads", Nucl. Eng. Design, Vol. 189, pp.7-57 (1999).
- [378] Theofanous, T. G. et al., "The Verification Basis of the PM-ALPHA Code", Nucl. Eng. Design, Vol. 189, pp.59-102 (1999).
- [379] Theofanous, T. G. et al., "The Verification Basis of the ESPROSE.m Code", Nucl. Eng. Design, Vol. 189, pp.103-138 (1999).
- [380] Theofanous, T. G. et al., "The Verification Basis of the ESPROSE.m Code", Proc. OECD / CSNI Specialists Meeting on Fuel-Coolant Interactions, Tokai-mura, Japan, pp.287-362 (1997).
- [381] Theofanous, T. G., "The Study of Steam Explosions in Nuclear Systems", Nucl. Eng. Des., Vol. 155, pp.1-26 (1995).
- [382] Theofanous, T. G. and Saito, M., "An Assessment of Class-9 (Core-Melt) Accidents for PWR Dry Containment System", Nucl. Eng. Design, Vol. 66, pp.301-332 (1982).
- [383] Theofanous, T. G. et al., "An Assessment of Steam-Explosion-Induced Containment Failure Part I: Probabilistic Aspects", Nucl. Sci. Eng., Vol. 97, pp.259-281 (1987).
- [384] Thompson T. J. and Beckerly, J. G., The Technology of Nuclear Safety (MIT Press), Vol. 1, pp.672 (1964).
- [385] Thyagaraja, A. and Fletcher, D.F., "Buoyancy driven, transient, two-dimensional thermal-hydrodynamics of a melt-water-steam mixture", Computers and Fluids, Vol. 16, pp.59-80 (1988).
- [386] Tomita, H., "Statistical Properties of Random Interface System", Prog. Theoretical Phys., Vol. 75(3), pp.482-495 (1986).
- [387] Toramaru, A., "Viscosity Control vs Diffusion Control in Bubble Nucleation", A Multidisciplinary Int. Sem. Intense Multiphase Interaction, Santa Barbara, pp.207-212 (1995).
- [388] Tsai, H. C. and Olander, D. R., "The Viscosity of Molten Uranium Dioxide", J. Nucl. Material, Vol. 44, pp.83-86 (1972).
- [389] Tsuruta, T. et al. Nucl. Sci. Tech., Vol. 22, pp.742 (1985).
- [390] Tsuruta, T. et al., "Experimental Study on the Self-Triggering Interaction between Melt and Water", Proc. Int. Sem. on Vapor Explosion and Explosive Eruptions, Sendai, pp.33-39 (1997).
- [391] Turland, B. D. et al., "Quantification of the Probability of Containment Failure Caused by an In-vessel Steam Explosion for the Sizewell B PWR", Nucl. Eng. Des., Vol. 155, pp.445-458 (1995).
- [392] USNRC, Second Steam Explosion Review Group Workshop, "A Reassessment of the Potential for an Alpha-Mode Containment Failure and a Review of the Current Understanding of Broader Fuel-Coolant Interaction Issues", NUREG-1524 (1996).
- [393] Ueno, I. et al., "Pressure Generation by Laser Pulse Heating of a Liquid Metal in Water", Proc. Int. Sem.

on Vapor Explosion and Explosive Eruptions, Sendai, pp.143-148 (1997).

- [394] Valentio, S. N., "The Importance of Internal Alminum Diffusion in Underwater Alminum Ignition", A Multidisciplinary Int. Sem. Intense Multiphase Interaction, Santa Barbara, pp.242-255 (1995).
- [395] Vierow, K. et al. "Development of the VESUVIUS module: molten jet breakup modeling and model verification", Proc. OECD/CSNI Specialists Meeting on Fuel-Coolant Interactions, Tokai-mura, Japan, 1997, JAERI-Conf 97-011, NEA/CSNI/R(97)26, pp.541-565 (1997).
- [396] Watanabe, S., "Application of an Exploding Wire in Water to Generation of a Vortex Ring with High Reynolds Number", Proc. Int. Sem. on Vapor Explosion and Explosive Eruptions, Sendai, pp.149-160 (1997).
- [397] Watanabe, T. and Ebihara, K., "Numerical Evaluation of Interfacial Area Concentration Using the Immiscible Lattice Gas", Nucl. Eng. Des., Vol. 188(1), pp.111-121 (1999).
- [398] Wells, J. T. et al., "A Lattice-Gas Automata Model for Heterogeneous Chemical Reactions at Mineral Surface and in Pore Network", Physica D, Vol. 47, pp.115-123 (1991).
- [399] Wilson, R. J. et al., "CAMEL II 37-Pin/7-Pin Intra-Pin Fuel Injection Test", Trans. ANS, Vol. 46, pp.504-505 (1984).
- [400] Witte, L. C., et al., "Heat transfer fragmentation during molten-metal/water interactions", J. Heat Transfer, Vol. 95, pp.521 (1973).
- [401] Wohletz, K. and Brown, W., "Particulate Size Distribution and Sequential Fragmentation/Transport Theory", A Multidisciplinary Int. Sem. Intense Multiphase Interaction, Santa Barbara, pp.235-241 (1995).
- [402] Wolf-Gladrow, D. A. et al., "Numerical Simulations of Hydrodynamics with a Pair Interaction Automaton in Two Dimensions", Comp. Sys., Vol. 4, pp.139-150 (1990).
- [403] Woodley, R. E., "The Viscosity of Molten Uranium Dioxide", J. Nucl. Material, Vol. 50, pp.103-106 (1974).
- [404] Woods, A. W., "A Model of Vulcanian Explosions", Nucl. Eng. Des., Vol. 155, pp.345-357 (1995).
- [405] Wright, A. E. et al., "Fast Reactor Safety Testing in TREAT in the 1980s", Proc. Int. Fast Reactor Safety Mtg., Snowbird, Vol. 2, pp.233-243 (1990).
- [406] Wright, R. W. and Humberstone G. H., Trans. ANS, Vol. 9, pp.305 (1966).
- [407] Yabe, T. and Xiao, F., "Simulation Technique for Dynamical Evaporation Processes", Proc. Int. Sem. on the Physics of Vapor Explosions, Tomakomai, pp.57-64 (1993).
- [408] Yabe, T. et al., "Simulation Technique for Dynamical Evaporation Processes", Nucl. Eng. Des., Vol. 155, pp.45-53 , (1995).
- [409] Yabe, T. et al., "Simulations of Fundamental Processes in Vapor Explosion Experiments", A Multidisciplinary Int. Sem. Intense Multiphase Interaction, Santa Barbara, pp.136-139 (1995).
- [410] Yabe, T., "Meso-Scale Simulation of Multiphase Interaction by CIP Method", Proc. Int. Sem. on Vapor Explosion and Explosive Eruptions, Sendai, pp.177-183 (1997).
- [411] Yagi, M. et al., "Measurement of Film Boiling Collapse on High Temperature Steel Ball Using Pressure Wave", Proc. 1996 National Heat Transfer Conf., Vol. 9, pp.336-343 (1996).

- [412] Yamano, N. et al., "Effect of Gravity-Fed Water from a Downcomer on Coolability of a Debris Bed", AIChE Symp. Ser., Vol. 83(257), pp.341-346 (1987).
- [413] Yamano, N. et al., "Phenomenological Studies on Fuel Coolant Interactions for Light Water Reactors", Proc. Int. Sem. on the Physics of Vapor Explosions, Tomakomai, pp.175-186 (1993).
- [414] Yamano, N. et al., "Phenomenological Studies on Melt-Coolant Interactions in the Alpha Program", Nucl. Eng. Des., Vol. 155, pp.369-389 (1995).
- [415] Yamano, N. et al., "Studies on Fuel Coolant Interactions During Core Melt Accident on Nuclear Power Plants", Proc. OECD/CSNI Specialist Mtg. on Fuel Coolant Interactions, Santa Barbara, pp.271-281 (1993).
- [416] Yamano, N. et al., "Study of Premixing Phase of Steam Explosion in ALPHA Program", Proc. CSNI Specialist Mtg. on Fuel-Coolant Interactions, NUREG/CP-0127, pp.1-17 (1995).
- [417] Yamano, N. et al., "Study of Premixing Phase of Steam Explosion in ALPHA Program", A Multidisciplinary Int. Sem. Intense Multiphase Interaction, Santa Barbara, pp.81-97 (1995).
- [418] Yamano, N. et al., "Study on Premixing of Steam Explosion at JAERI", Nucl. Eng. Design, Vol. 189, pp.205-221 (1999).
- [419] Yang, Y. et al., "A Novel Method to Suppress Pseudo-Diffusion in Simulation of Rapid Multi-Phase Interaction", A Multidisciplinary Int. Sem. Intense Multiphase Interaction, Santa Barbara, pp.140-144 (1995).
- [420] Yang, Y. et al., "JASMINE-PRO a Code for the Propagation Phase on Steam Explosion", 1st Korea-Japan Symposium on Nucl. Thermal Hydraulics and Safety, pp.511-518 (1998).
- [421] Yang, Z. L. et al., "Numerical Investigation of Bubble Growth and Detachment by the Lattice-Boltzmann method", Int. J. Heat and Mass Transfer, Vol. 44, pp.195-206 (2001).
- [422] Yeung, C., "Scaling and the Small-Wave-Vector Limit of the Form Factor in Phase-Ordering Dynamics", Phys. Rev. Lett., Vol. 61(9), pp.1135-1138 (1988).
- [423] Yoshizawa, Y., "The Effects of Non-Condensable Gas on ZND Detonation Model and the Applicability of the Model to Vapor Explosion", Proc. Int. Sem. on Vapor Explosion and Explosive Eruptions, Sendai, pp.139-142 (1997).
- [424] Young, M. F. et al., "Hydrogen Generation During Fuel/Coolant Interactions", Nucl. Sci. Eng., Vol. 98, pp.1-15 (1988).
- [425] Yuen, W. W. and Theofanous, T. G., "On the Existence of Multiphase Thermal Detonations", Int. J. Multiphase Flow, Vol. 25, pp.1505-1519 (1999).
- [426] Yuen, W. W. and Theofanous, T. G., "On the Existence of Multiphase Thermal Detonations", Proc. Int. Sem. on Vapor Explosion and Explosive Eruptions, Sendai, pp.3-10 (1997).
- [427] Yuen, W. W. and Theofanous, T. G., "The Prediction of 2D Thermal Detonation and Resulting Damage Potential", Nucl. Eng. Des., Vol. 155, pp.289-309 (1995).
- [428] Yuen, W. W. and Theofanous, T. G., "The Prediction of 2D Thermal Detonation and Resulting Damage Potential", Proc. CSNI Specialists Mtg. on Fuel-Coolant Interactions, Santa Barbara, pp.233-250 (1993).

- [429] Yuen, W. W. et al., "On the Fundamental Microinteractions That Support the Propagation of Steam Explosions", Proc. 5th Int. Top. Mtg. on Nucl. Reactor Thermal Hydraulics (NURETH-5), pp.627-636 (1992).
- [430] Zhao, Y. G. and Chan S. H., "Phase Averaging Technique for Multiphase, Turbulent, Reacting Flows and an Application to Liquid Metal Combustion", A Multidisciplinary Int. Sem. Intense Multiphase Interaction, Santa Barbara, pp.176-188 (1995).
- [431] Zhou, J. and Podowski, M. Z., "Modeling and Analysis of Hydrodynamic Instabilities in Two-Phase Flow Using Two-Fluid Model", 9th Int. Top. Mtg. on Nucl. Reactor Thermal Hydraulics (NURETH-9), San Francisco, Log No. 268 (1999).
- [432] Ziegler, D. P., "Boundary Conditions for Lattice Boltzmann Simulation", J. Stat. Phys., Vol. 71(5/6), pp.1171-1177 (1993).
- [433] Zimanowski, B. and Frohlich, G., "High Temperature Entrapment Explosions in a Transparent System", A Multidisciplinary Int. Sem. Intense Multiphase Interaction, Santa Barbara, pp.193-200 (1995).
- [434] Zimanowski, B. et al., "Experiments on Steam Explosion by Interaction of Water with Silicate Melts", Nucl. Eng. Des., Vol. 155, pp.335-343 (1995).
- [435] Zimanowski, B. et al., "Experiments on Vapor Explosion by Interaction of Water with Silicate Melts", Proc. Int. Sem. on the Physics of Vapor Explosions, Tomakomai, pp.149-156 (1993).
- [436] Zimmer, H. J. et al., "Thermal Fragmentation of Molten Alumina in Sodium", Proc. 4th. Int. Top. Mtg. on Nucl. Reactor Thermal Hydraulics, Karlsruhe, Vol. 1, pp.268-273 (1989).
- [437] Zinn, W. H., Nucleonics, Vol. 14 (1955).
- [438] Zou, Q. and He, X., "On Pressure and Velocity Boundary Conditions for the Lattice Boltzmann BGK Method", Phys. Fluids, Vol. 9(6), pp.1591-1598 (1997).
- [439] von Berg, E. et al., "Modeling of the Breakup of Melt Jets in Liquids for LWR Safety Analysis", Nucl. Eng. Design, Vol. 149, pp.419-429 (1994).
- [440] 阿部豊、小林朋能, 「高温粒子表面上の蒸気膜の崩壊過程に関する研究（第1報：蒸気膜崩壊圧力の測定）」, 日本機械学会論文集B編, Vol. 66(642), pp.627-632 (2000).
- [441] 阿部豊、柄尾大輔, 「高温粒子表面上の蒸気膜の崩壊過程に関する研究（第2報：微視的崩壊挙動に及ぼすサブクーリングの影響）」, 日本機械学会論文集B編, Vol. 66(642), pp.633-639 (2000).
- [442] 稲室ら, 「二相系格子ボルツマン法による気液二相流シミュレーション」, 日本混相流学会 年会 講演会 2001, pp.287-288 (2001).
- [443] 加藤ら, 「セルオートマトン法 一複雑系の自己組織化と超並列処理」, 森北出版 (1998).
- [444] 海老原健一、渡辺正, 「格子ガス気液モデルを用いた外力場中における液滴変形に関する研究」, JAERI-Research 2000-042 (2000).
- [445] 関信弘, 「伝熱工学」, 森北出版 (1988).
- [446] 吉沢克巳、高橋亮一, 「セル・オートマトン法による流れの数値解析」, 日本機械学会論文集B編, Vol. 57(540), pp.2663-2670 (1991).
- [447] 更田豊志、藤城俊夫, 「反応度事故時の蒸気爆発に関する実験的研究」, 日本機械学会論文集B

- 編, Vol. 56(525), pp.280-288 (1990).
- [448] 甲藤好郎, 「伝熱概論」, 養賢堂 (1964).
- [449] 高橋亮一、松隈洋介, 「Poiseuille 流れのオートマトン解における乱れ」, 日本機械学会論文集 B 編, Vol. 58(545), pp.106-110 (1992).
- [450] 高田ら, 「三次元熱流体格子ボルツマン・モデルによる流体解析」, 日本機械学会論文集 B 編, Vol. 64(628), pp.3934-3941 (1998).
- [451] 高田尚樹, 「格子ボルツマン法による流体现象の数値シミュレーションに関する研究」, 神戸大学大学院自然科学研究科博士論文 (1998).
- [452] 高田尚樹、三澤雅樹, 「せん断流れおよび多孔質物体内における二相流体挙動の格子ボルツマンシミュレーション」, 日本混相流学会 年会講演会 2001, pp.295-296 (2001).
- [453] 高島武雄、飯田嘉宏, 「外部圧力波によって生ずる単一液滴の蒸気爆発の蒸気膜崩壊過程」, 第 31 回日本伝熱シンポジウム, 札幌, Vol. 3, pp.811-813 (1994).
- [454] 斎藤武雄, 「移動境界伝熱学」, 養賢堂 (1994).
- [455] 斎藤武雄, 「数値伝熱学」, 養賢堂 (1986).
- [456] 秋吉ら, 「蒸気爆発に対する蒸気膜内の不凝縮性ガスの影響に関する研究」, 日本機械学会論文集 (B 編) , Vol. 54(499), pp.630-635 (1988).
- [457] 秋吉ら, 「溶融金属と水の熱的相互作用を応用した急速凝固粒の作成に関する研究」, 日本機械学会論文集 B 編, Vol. 56(521), pp.94-100 (1990).
- [458] 小林ら, 「9速度セルラオートマトン法による衝撃波の数値シミュレーション」, 日本機械学会論文集 B 編, Vol. 64(619), pp.84-91 (1998).
- [459] 小林正興、高橋亮一, 「セルオートマトン法による自然対流の解析」, 日本機械学会論文集 B 編, Vol. 57(540), pp.2671-2677 (1991).
- [460] 庄司ら, 「急激な温度勾配をつけた水中で生じる小規模蒸気爆発の研究 (冷却液サブクール効果についての検討)」, 日本機械学会論文集 B 編, Vol. 52(479), pp.2633-2639 (1986).
- [461] 庄司ら, 「静止溶融すず一流水系で生じる小規模水蒸気爆発に関する実験的研究」, 日本機械学会論文集 B 編, Vol. 49(476), pp.2190-2199 (1983).
- [462] 松隈ら, 「セルラオートマトン法を用いた複雑な境界を持つ流路内の流れの計算」, 日本機械学会論文集 B 編, Vol. 64(622), pp.1617-1622 (1998).
- [463] 松隈ら, 「格子ガスオートマトン法による二成分流体の凝集・分離の数値計算」, 日本機械学会論文集 B 編, Vol. 66(652), pp.3049-3055 (2000).
- [464] 松隈ら, 「格子ガスオートマトン法を用いた複雑形状流路内の流動解析」, 日本混相流学会誌, Vol. 13(2), pp.126-137 (1999).
- [465] 松隈ら, 「格子気体オートマトン法による複雑形状流路内の熱流動解析」, 第 10 回計算力学講演会論文集 97-7 号 (1997).
- [466] 松隈ら, 「3 次元格子ガスオートマトン法による液滴微粒化の数値計算」, 日本機械学会誌 B 編, Vol. 67(659), pp.1654-1661 (2001).
- [467] 松隈洋介、高橋亮一, 「セルラオートマトン法による二成分対向流界面乱れの評価」, 日本機械学会論文集 B 編, Vol. 61(589), pp.3145-3152 (1995).

- [468] 松隈洋介、高橋亮一、「流入・流出部の境界条件に対するセルラオートマトン表現」, 日本機械学会論文集 B 編, Vol. 61(588), pp.2826-2832 (1995).
- [469] 森山ら,「蒸気爆発に関する実験的研究の概要」, JAERI-Review 94-010 (1994).
- [470] 森山ら,「水蒸気爆発解析コード JASMINE の開発」, JAERI-DATA/CODE 95-016 (1995).
- [471] 杉山ら,「ナトリウムプールに融点で落下する溶融銅滴の破碎機構」, 日本原子力学会誌、ショートノート, Vol. 42(12), pp.1311-1314 (2000).
- [472] 杉山憲一郎、松場賢一,「溶融アルミニウム滴の破碎現象」, 日本原子力学会誌, Vol. 43(1), pp.83-89 (2001).
- [473] 杉本ら,「シビアアクシデント研究に関する CSARP 計画の成果」, 日本原子力学会誌, Vol. 39(2), pp.123-134 (1997).
- [474] 瀬田ら,「二相流に対する格子ボルツマン・スキームの提案」, 日本機械学会論文集 B 編, Vol. 65(634), pp.97-105 (1999).
- [475] 瀬田剛、高橋亮一,「格子ボルツマン法による潜熱・表面張力エネルギーのモデル化」, 日本混相流学会 年会講演会 2001, pp.289-290 (2001).
- [476] 瀬田剛、高橋亮一,「格子ボルツマン法による二相流のシミュレーション」, 第4回オーガナイズド混相流フォーラム, pp.55-60 (2000).
- [477] 成合ら,「シビアアクシデント研究に関する熱流動研究の最近の動向」, 日本原子力学会誌, Vol. 39(9), pp.739-752 (1997).
- [478] 成合英樹,「高温融体・水による蒸気爆発のモデリングとシミュレーション」, 月刊地球, Vol. 22(6), pp.379-386 (2000).
- [479] 西川兼康、藤田恭伸,「伝熱学」, 理工学社 (1982).
- [480] 西尾茂文、上村光宏,「サブクール沸騰における膜沸騰熱伝達と極小熱流束条件に関する研究（第1報、白金球一大気圧水のプール沸騰系）」, 日本機械学会論文集 B 編, Vol. 52(476), pp.1811-1816 (1986).
- [481] 斎藤由佳,「セルラ・オートマトン法による混相流の解析」, 東京工業大学機械工学科修士論文 (1994).
- [482] 船舶技術研究所 原子力船部, 「圧力波の発生と伝播の研究 報告書」, SJ252-76-01, pp.1-46 (1976).
- [483] 早田ら,「事故時格納容器挙動試験 (ALPHA) 計画」, 原子力工業, Vol. 38(8), pp.38-44 (1992).
- [484] 大阪大学,高温物体への液体金属の接触挙動, PNC J265 81-04, pp.1-58 (1981).
- [485] 蔦原ら,「セル・オートマトン法による移動平板周りの流れ」, 日本機械学会論文集 B 編, Vol. 59(564), pp.2477-2483 (1993).
- [486] 蔦原ら,「格子気体法・格子ボルツマン法 ー新しい数値流体力学の手法ー」, コロナ社 (1999).
- [487] 渡会ら,TMI-2号機の調査研究成果, 日本原子力学会誌, Vol. 32(4), pp.338-350 (1991).
- [488] 渡辺ら,「減圧に伴う液体窒素のフラッシング現象（第1報、比較的遅い減圧速度の場合）」, 日本機械学会論文集 B 編, Vol. 61(585), pp.1849-1854 (1995).
- [489] 渡辺悟,「並列計算機を用いたセルラオートマトン法による複雑流れの解析」, 東京工業大学機械

工学科修士論文 (1996).

- [490] 渡辺悟、高橋亮一、「セルラオートマトン法によるかくはん槽内の 2 成分流の混合計算」, 日本機械学会論文集 B 編, Vol. 63(605), pp.194-200 (1997).
- [491] 渡辺正、燕木英雄, 「粒子法による熱伝導一対流遷移の研究」, JAERI-Research 96-046 (1996).
- [492] 湯浅ら, 「はじめての並列プログラミング」, 共立出版 (1999).
- [493] 栃尾ら「3 次元格子ガスオートマトン法を用いた高空孔率多孔性固体の流動特性解析」日本機械学会誌 B 編, Vol.66(666), pp.325-330 (2002).
- [494] 栃尾ら「3 次元格子ガスオートマトン法を用いた二成分流体の凝集・分離計算」日本機械学会誌 B 編, Vol. 68(673), pp.2511-2518 (2002).
- [495] 内藤ら, 「軽水炉発電プラントの事故シミュレーションシステム IMPACT の開発」, 日本原子力学会誌, Vol. 41(3), pp.174-201 (1999).
- [496] 日本機械学会, 「沸騰熱伝達」, 日本機械学会 (1965).
- [497] 日本機械学会, 「沸騰熱伝達と冷却」, 日本工業出版 (1989).
- [498] 日本原子力学会, 「平成 11 年度シビアアクシデント熱流動評価現象」 (2000)
- [499] 日本原子力学会, 「平成 12 年度シビアアクシデント熱流動評価現象」 (2001)
- [500] 八木ら, 「蒸気爆発進展過程における膜沸騰の崩壊挙動に関する研究」, JAERI-Research 96-032 (1996).
- [501] 飯田ら, 「高温液小滴と低沸点液による蒸気爆発の機構に関する研究(第 1 報、単一液による実験)」, 日本機械学会論文集 B 編, Vol. 52(476), pp.1777-1783 (1986).
- [502] 飯田ら, 「高温液小滴と低沸点液による蒸気爆発の機構に関する研究(第 2 報、低温液温度の影響と複数滴による実験)」, 日本機械学会論文集 B 編, Vol. 53(485), pp.222-230 (1987).
- [503] 飯田嘉宏、高島武雄, 「蒸気爆発とその機構に関する実験」, ながれ, Vol. 7, pp.203-211 (1988).
- [504] 飛田ら, 第 22 回伝熱シンポジウム講演論文集, A212 (1985).