DAFTAR PUSTAKA

Arizona R., et al., 2018, The effects of surface tension on the spreading ratio during the impact of *multiple droplets* onto a hot solid surface, *MATEC Web of Conferences* 197,08016.

Aziz S.D., & Chandra S., 2000, Impact, recoil and splashing of molten metal droplets, *International Journal of Heat and Mass Transfer*, 43, p(2841±2857).

Bai, C., & Gosman, A.D., 1995, Development of methodology for spray impingement simulation. *Society Automot. Eng*. *Technical Paper* 950283, 69–87.

Bernardin, J.D., Stebbins, C.J. & Mudawar, I., 1997, Mapping of impact and heat transfer regimes of water drops impinging on a polished surface, *Int. J. Heat Mass Transfer* 40 (2), pp. 247–267.

Bertola, V., 2004, Drop impact on a hot surface: Effect of a polymer additive, *Experiment in Fluids* 37, 653–664.

Bhatt, R. J., Patel, H. J. & Vashi, O. G., 2014, Nano Fluids: A New Generation Coolants', *InternatIonal Journal of research In Mechanical engineering & technology* 5762, pp. 16–22.

Bolle, L. & Moureau, J. C. 1981 Spray cooling of hot surfaces. *In Multiphase Science and Technology* (ed. J. D. Hewitt & N. Zuber), pp. 1–92. New York: Hemisphere.

Bussmann, M., et al., 2000, Modeling the splash of a droplet impacting a solid surface, *Phys. Fluids* 12, 3121.

Castanet, G., et al., 2009, Dynamics and temperature of droplets impacting onto a heated wall, *International Journal of Heat and Mass Transfer,* 52,670–679.

Chandra, S. dan Avedisian, C. T. 1991, On the collision of a droplet with a solid surface, *Proceedings: Mathematical and Physical Sciences*, Vol. 432, No. 1884, pp. 13-41

Chaves, H., Kubitzek, A.M., & Obermeier, F., 1999, Dynamic processes occuring during the spreading of thin liquid films produced by drop impact on hot walls, *International Journal of Heat Fluid Flow*, 20, 470–476.

Clanet, C., et al., 2004, Maximal deformation of an impacting drop, *Journal of Fluid Mechanics* 517, 199–208.

Clay, M. A. dan Miskis, M.J. 2004, Effects of surfactant on droplet spreading, *Physics of Fluids*,16,8.

Cossali, G.E., et al., 2005, Secondary atomization produced by single drop vertical impacts onto heated surfaces, *Experimental Thermal and Fluid Science,* 29, 937–946.

Deendarlianto. et al., 2008, The Effect of Contact Angle on the Evaporation of Water Droplet on Heated Solid Surface. *Fifth Int. Conference on Transport Phenomena in Multiphase Systems*, pp.59–64. Bialystok–Poland.

Deendarlianto, et al., 2014, Effect of static contact angle on the droplet dynamics during the evaporation of a water droplet on the hot walls, *International Journal of Heat and Mass Transfer*, 71, 691–705.

Deendarlianto. et al, 2016, The effects of the surface roughness on the dynamic behavior of the successive micrometric droplets impacting onto inclined hot surfaces. *International Journal of Heat and Mass Transfer*, 101, 1217–1226.

Deendarlianto, et al., 2018, The interfacial dynamics of the micrometric droplet diameters during the impacting onto inclined hot surfaces, *International Journal of Heat and Mass Transfer* 126, 39–51.

Devireddy S., et al. 2016, Improving the cooling performance of automobile radiator with ethylene glycol water based TiO2 nanofluids, Int. Commun. Heat Mass Transf. 78,121–126.

Eslamian, M., 2014, Spray-on Thin Film PV Solar Cells: Advances, Potentials and Challenges, *Coatings*. 4, 60–84.

Frank P. Incropera & David P. DeWitt., 1990, Fundamentals of Heat and Mass Transfer, 3rd ed. This material is used by permission of John Wiley & Sons, Inc.

Fujimoto H., et al., 2002, Experimental study of successive collision of two water droplets with solid, *Experiments in Fluids* Vol.33, pp 500-502.

Fujimoto H., et al., 2004, Collision dynamics of two droplets impinging successively onto a hot solid, *ISIJ International* 44, 1049–1056

Fujimoto H., et al., 2008, Interaction phenomena of two water droplets successively impacting onto a solid surface. *Int. J. Therm. Sci*. 47, 229–236.

Fujimoto, H., et al., 2017, Deformation behavior of two droplets successively impinging obliquely on hot solid surface, *Experimental Thermal and Fluid Science* 81, 136–146.

Fujita, Y., et al., 1994, Heat transfer in nucleate pool boiling mixtures, *International Journal of Heat and Mass Transfer,* 37, 291-302.

Fukai, J., et al., 1995, Theoretical study of droplet impingement on a solid surface below the Leidenfrost temperature, *Int. J. Heat Mass Transfer 10, 2490-2492.*

Gottfried, et al., 1996, The Leidenfrost phenomenon: film boiling of liquid droplets on a flat plate. *Int. J. Heat Mass Transfer*, 9, 1167-1187.

Grissom, W. M. dan Wierum, F.A., Liquid Spray cooling of Heated Surface. Int. J Heat Mass Transfer Vol. 34, pp 261 – 271, 1981

Hakim et al. 2018, The effect of surface roughness on dynamic behaviour of the successive *multiple droplets* impacting onto aluminium hot surfaces, IOP Conf. Series: Materials Science and Engineering 434, 012183.

Hassebook, 2016, Effects of Droplet Diameter and Fluid Properties on the Leidenfrost Temperature of Polished and Micro/Nanostructured Surfaces, *Journal of Heat Transfer ASME*, Vol 38.

Hatta, N. et al., 1997, Experimental study of deformation mechanism of a water droplet impinging on hot metallic surfaces above the Leidenfrost temperature: (Data bank contribution), *J. Fluids Eng*. 119, 692–699.

Hidaka, S., et al., 2006, Effect of contact angle on wetting limit temperature, *Heat Transfer Asian Res*. 35 (7),513–526.

Jia, W., & Qiu, H., 2003, Experimental Investigation of Droplet Dynamics and Heat Transfer in Spray cooling, *Experimental Thermal and Fluid Science* 27, pp 829-838.

Kalantari, D., & Tropea, C., 2007, Spray impact onto flat and rigid walls: Empirical characterization and modelling, *International Journal of Multiphase Flow*. 33, 525–544.

Kandlikar, S. G. & Alves, L., 1999, Effects of Surface Tension and Binary Diffusion on Pool Boiling of Dilute Solutions: An Experimental Assessment, *Journal of Heat Transfer*, 121, p. 488.

Kandlikar, S. G., et al., 2001, Effects of Weber Number and Surface Temperature on the Boiling and Spreading Characteristics of Impinging Water Droplets. *35th National Heat Transfer Conference*.

Kim J., 2006, Spray cooling heat transfer the state of the art, *International Journal of Heat and Fluid Flow*, 28, 753-767.

Kim, H.Y., & Chun, J.H., 2001, The recoiling of liquid droplets upon collision with solid surfaces, *Physic of Fluids,* 13, 643–659.

Kompinsky, E., 2013, Experimental study on the dynamics of binary fuel droplet impact on a heated surface, *Chemical Engineering Science*, 98, 186-194.

Lagubeau, G., et al., 2012, Spreading dynamics of drop impacts, *Journal of Fluid Mechanics*, 1–11.

Lee, S.Y., & Ryu, S.U., 2006, Recent Progress of Spray-Wall Interaction Research, *Journal of Mechanical Science and Technology*, 20, 8, 1101-1117

Lesser, M.B. & Field, J. E., 1983, Impact of Compressible Liquids.', *Annual Review of Fluid Mechanics*, 15, pp. 97–122.

Li, R., et al., 2010, Coalescence of two droplets impacting a solid surface, *Experiments in Fluids*, 48(6), pp. 1025–1035.

Liang, G., et al., 2016a, Contact vaporization of an impacting drop on heated surfaces, *Experimental Thermal and Fluid Science,* 74, 73–80.

Liang, G. et al., 2016b, Boiling from liquid drops impact on a heated wall, *Int. J. Heat Mass Transfer,* 100, 48–57.

Liu, H., 2000, Science and Engineering of Droplets Fundamentals and Applications. *William Andrew Publishing*, Norwich, New York, U.S.A pp. 217.

Manzello, S.L., & Yang, J.C., 2002, On the Collision Dynamics of a Water Droplet Containing an Additive on a Heated Solid Surface, *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences,* 458, 2417-2444

Manzello, S.L., & Yang, J.C., 2004, An experimental investigation of water droplet, impingement on a heated wax surface, *International Journal of Heat and Mass Transfer,* 47 1701-1709.

Meaden M., & Meissen E. 2011, Dynamics of successive drop impacts on a solid surface.

Mitrakusuma, W.H., et al., 2017, The dynamics of the water droplet impacting onto hot solid surfaces at medium Weber numbers, *Heat Mass Transfer* 53, 3085–3097.

Miyauchi, M., et al. 2002, Reversible wettability control of TiO2 surface by light irradiation, *Surface Science* 511, 401‑407

Moita, A.S. & Moreira, A.L.N., 2007, Drop impacts onto cold and heated rigid surfaces: Morphological comparisons, disintegration limits and secondary atomization, *International Journal of Heat Fluid Flow,* 28, 735–752.

Moreira, A.L.N. et al., 2010, Advances and challenges in explaining fuel spray impingement How much of single droplet impact research is useful? *Progress in Energy and Combustion Science* 36, 554–580, 2010

Mundo, C.H.R., et al., 1995, Droplet wall collisions experimental studies of the deformation and breakup process, *International Jurnal Multiphase*, Vol 21, No.2, pp.151-173.

Muthusamy, J.P., et al., 2016, Effects of High Frequency Droplet Train Impingement on Crown Propagation Dynamics and Heat Transfer, *J. Heat Transfer,*138, 020903

Negeed, E.R., et al., 2010, Experimental study on the effect of surface conditions on evaporation of spray liquid droplet, *International Journal of Thermal Sciences* 49, p2250-2271.

Negeed, E.R., et al., 2013, Effect of the surface roughness and oxidation layer on the dynamic behavior of micrometric single water droplets impacting onto heated surfaces, *International Journal of Thermal Sciences,* 70, 65-82.

Nejad, V.M., et al., 2003, Air bubble entrapment under an impacting droplet, *AIP Physic of Fluids*, 15, 173.

Pasandideh, F., et al., 2001, Cooling effectiveness of a water drop impinging on a hot surface, *Int. J. Heat Fluid Flow*. 22, 201-210.

Peng, X.F., et al, 1992, On the Wetting Mechanism of Liquid on Hot Surfaces. *Int. J. Heat Mass Transfer*. Vol. 35, No. 6, pp 1615 –1624.

Pontes, P., et al., 2017, Time Resolved Infrared Analysis of Droplet Impacts onto Heated Surfaces Under Extreme Wetting Scenarios, *28th Conference on Liquid Atomization and Spray Systems,* Valencia, Spain.

Qiao,Y.M. and Chandra,S., 1998, Spray Cooling Enhancement by Addition of a Surfactant, *Journal of Heat Transfer*, 120, 93.

Qiao,Y.M. and Chandra,S., 1997, Experiments on adding a surfactant to water drops boiling on a hot surface. *Proceedings Royal Society London* A, 453, pp 673-689.

Rein, M., 1993, Phenomena of liquid drop impact on solid and liquid surfaces. Fluid Dynamics Research, 12(2):61

Rein, M., 2002, Droplet Surface Interactions. International Centre For Mechanical Sciences, Springer-Verlag Wien, New York.

Riswanda, A., et al., 2018, Study on the effect of Weber Number to heat transfer of multiple droplets on hot stainless-steel surface, *MATEC Web of Conference*, 154, 1114.

Roisman, I.V., et al., 2002, Normal impact of a liquid drop on a dry surface: model for spreading and receding, *Proc. R. Soc. A Math. Phys. Eng. Sci*. 458, 1411–1430.

Senda, J., et al. 1988, The Heat transfer Characteristics of a Small Droplet Impinging upon a Hot Surface. *JSME International Journal, Series II,* 31, 1, 105-111.

Shaw, D.R., et al., 2000, Effects of Spray Volume and Droplet Size on Herbicide Deposition and Common Cocklebur (Xanthium strumarium) Control, *Weed Technology*,14, 321-326.

Shen, J., et al., 2009, Simultaneous droplet impingement dynamics and heat transfer on nano-structured surfaces, *Exp. Therm. Fluid Sci*. 34, 496-503.

Takata, Y., et al., 2005, Effect of surface wettability on boiling and evaporation, *Energy* 30, 209–220.

Tang, C., et al., 2017, Dynamics of droplet impact on solid surface with different roughness, International Journal of Multiphase Flow, 96, 56-69.

Thokchom, A.K., et al., 2017, Characterizing Self-assembly and Deposition Behavior of Nanoparticles in Inkjet-printed Evaporation droplets, *Sensors and Actuators B. Chem*.

Tong A.Y, et al., 2007, On the Successive Impingement of Droplets onto a Substrate, *Numerical Heat Transfer, Part A: Applications: An International Journal of Computation and Methodology*, 52:6, 531-548.

Visaria, M. and Mudawar, I., 2009, Application of two-phase spray cooling for thermal management of electronic devices, *IEEE Trans. Compon. Packag. Technol*. 32, 784–793

Wibowo, T., dkk., 2016, Studi eksperimental perilaku multiple droplets terhadap perubahan temperatur pada angka Weber rendah, *Proceeding of National Symposium on Thermofluids VIII.*

Wibowo, T., dkk., 2017, Analisa Fenomena Tumbukan Multiple droplets pada Temperatur Permukaan Film Boiling pada Weber Menengah, *Proceeding Seminar Nasional Tahunan Teknik Mesin (SNTTM) XVI.*

Wibowo, T., et al., 2018, The effects of the material conductivity on the dynamics behavior of the multiple droplets impacting onto hot surface, *AIP Conference Proceedings* 1983, 020015.

Wibowo, T., et al., 2018, The dynamics behavior of successive multiple droplets impacting onto hot surface under high concentration of ethylene glycol aquades solution, *AIP Conference Proceedings,* 2001, 030009.

Wibowo, T., et al., 2018, The effect of pressure and frequency on the dynamic behavior and evaporation time of successive water droplets impacting onto hot surface, *MATEC Web of Conference*, 154,1107.

Whisenant, S.G., et al., 1993, Droplet Size and Spray Volume Effects on Honey Mesquite Mortality with Clopyralid, *J. Range Manage*, 46, 257-261.

Yarin, A.L., 2006, Drop Impact Dynamics: Splashing, Spreading, Receding, Bouncing, Annual Review of Fluid Mechanics 38, 159–192.

Ying, Z., 2012, Investigation of Liquid Droplet and Liposome Spreading on Smooth and Patterned Substrates, *Dissertation*.

Zhang, T., et al., 2016, Effects of high frequency droplet train impingement on spreading-splashing transition, film hydrodynamics and heat transfer, *J. Heat Transfer*, 138, 020902.

Zhang, T., et al., 2017, Experimental and Numerical Visualization of Droplet-Induced Crown Splashing Dynamics, *J. Heat Transfer* 139, 020909

Zhang, X. and Basaran, O.,1997, Dynamic Surface Tension Effects in Impact of a Drop with a Solid Surface, *Journal of colloid and interface science*, 187(1), pp. 166–78.