

DAFTAR PUSTAKA

- Benther, J. D., Pelaez-Restrepo, J. D., Stanley, C., & Rosengarten, G. (2021). Heat transfer during multiple droplet impingement and spray cooling: Review and prospects for enhanced surfaces. *International Journal of Heat and Mass Transfer*, 178, 121587.
- Bergman, T. L., Lavine, A. S., Incropera, F. P., & DeWitt, D. P. (2017). *Fundamentals of heat and mass transfer* (8th ed.). John Wiley & Sons.
- de Gennes, P. G., Brochard-Wyart, F., & Qu  r  , D. (2004). *Capillarity and Wetting Phenomena: Drops, Bubbles, Pearls, Waves*. Springer.
- Deendarlianto, Pradecta, M.R., Prakoso, T., Indarto, Mitrakusuma, W.H. and Widayapara, A., 2021. Contact angle dynamics during the impact of single water droplet onto a hot flat practical stainless steel surface under medium Weber numbers. *Heat and Mass Transfer*, 57(7), pp.1097-1106.
- Engineering ToolBox. (t.t.-a). Water density, specific weight and thermal expansion coefficients - Temperature and pressure dependence. Engineering ToolBox. https://www.engineeringtoolbox.com/water-density-specific-weight-d_595.html (Diakses pada 24 Juni 2026).
- Engineering ToolBox. (t.t.-b). Surface tension – Water in contact with air. Engineering ToolBox. https://www.engineeringtoolbox.com/water-surface-tension-d_597.html. (Diakses pada 24 Juni 2026).
- Gholijani, A., Schlawitschek, C., Gambaryan-Roisman, T., & Stephan, P. (2020). Heat transfer during drop impingement onto a hot wall: The influence of wall superheat, impact velocity, and drop diameter. *International Journal of Heat and Mass Transfer*, 153, 119661.
- Ghossein, J., Kendurkar, C., Boreyko, J. B., & Coutier-Delgosha, O. (2026). Effects of surface roughness on droplet impact dynamics. *Soft Matter. Advance Article*. <https://doi.org/10.1039/D6SM00167J>
- Hao, J., Green, S. I., & Cheng, P. (2017). Effect of surface roughness on droplet splashing. *Physics of Fluids*, 29(12), 122105. <https://doi.org/10.1063/1.5005488>
- International Energy Agency (IEA). (2025). Share of electricity consumption by data centre and equipment type, 2024. IEA. <https://www.iea.org/data-and-statistics/charts/share-of-electricity-consumption-by-data-centre-and-equipment-type-2024> (Diakses pada 24 Juni 2026).
- Josserand, C., & Thoroddsen, S. T. (2016). Drop impact on a solid surface. *Annual review of fluid mechanics*, 48(1), 365-391.
- Kung, C. H., Sow, P. K., Zahiri, B., & M  rida, W. (2019). Assessment and interpretation of surface wettability based on sessile droplet contact angle measurement: challenges and opportunities. *Advanced Materials Interfaces*, 6(18), 1900839.
- Li, M., & Zinkle, S. J. (2012). Physical and mechanical properties of copper and copper alloys.
- Liang, G., & Mudawar, I. (2017). Review of spray cooling–Part 1: Single-phase and nucleate boiling regimes, and critical heat flux. *International Journal of Heat and Mass Transfer*, 115, 1174-1205.

- Mitrakusuma, W.H., Kamal, S., Indarto, Dyan Susila, M., Hermawan and Deendarlianto, 2017. The dynamics of the water droplet impacting onto hot solid surfaces at medium Weber numbers. *Heat and Mass Transfer*, 53(10), pp.3085-3097.
- Moghtadernejad, S., Lee, C., & Jadidi, M. (2020). An introduction of droplet impact dynamics to engineering students. *Fluids*, 5(3), 107.
- Mondal, M. T. H., Alam, M. S., & Moore, A. L. (2024). Heat transfer and phase interface dynamics during impact and evaporation of subcooled impinging droplets on a heated surface. *Applied Thermal Engineering*, 248, 123152.
- National Institute of Standards and Technology (NIST) (2025) NIST Chemistry WebBook (SRD 69): Thermophysical Properties of Fluid Systems. <https://webbook.nist.gov/chemistry/fluid/>. Diakses pada 27 Juni 2026.
- Nukiyama, S. (1966). The maximum and minimum values of the heat Q transmitted from metal to boiling water under atmospheric pressure. *International Journal of Heat and Mass Transfer*, 9(12), 1419-1433.
- Peakall, J., & Warburton, J. (1996). Surface tension in small hydraulic river models-the significance of the Weber number. *Journal of Hydrology (New Zealand)*, 199-212.
- Prabhu, K. N., & Fernandes, P. (2007). Effect of surface roughness on metal/quenchant interfacial heat transfer and evolution of microstructure. *Materials & design*, 28(2), 544-550.
- Richard, D., Clanet, C., & Quéré, D. (2002). Contact time of a bouncing drop. *Nature*, 417(6891), 811-811.
- Singh, R.K., Hodgson, P.D., Sen, N. and Das, S., 2021. Effect of surface roughness on hydrodynamic characteristics of an impinging droplet. *Langmuir*, 37(10), pp.3038-3048.
- Smakulski, P., & Pietrowicz, S. (2016). A review of the capabilities of high heat flux removal by porous materials, microchannels and spray cooling techniques. *Applied thermal engineering*, 104, 636-646.
- Tang, C., Qin, M., Weng, X., Zhang, X., Zhang, P., Li, J., & Huang, Z. (2017). Dynamics of droplet impact on solid surface with different roughness. *International Journal of Multiphase Flow*, 96, 56-69.
- Vargaftik, N. B., Volkov, B. N., & Voljak, L. D. (1983). International tables of the surface tension of water. *Journal of Physical and Chemical Reference Data*, 12(3), 817-820.
- Wu, Z., Zhang, G., Lu, S., Leng, P., Yu, Y., Deng, J., & Huang, W. (2025). A comprehensive review of cold plate liquid cooling technology for data centers. *Chemical Engineering Science*, 310, 121525.
- Xu, B., Yang, J., Chen, Z., & Wang, X. (2025). Dynamic behaviors and heat transfer of HFE-7100 droplet impingement on heated copper surfaces. *International Journal of Heat and Mass Transfer*, 244, 126965.
- Zhang, Q., Meng, Z., Hong, X., Zhan, Y., Liu, J., Dong, J., ... & Deen, M. J. (2021). A survey on data center cooling systems: Technology, power consumption modeling and control strategy optimization. *Journal of Systems Architecture*, 119, 102253.

Zhang, X., Li, K., Liu, X., Wu, X., Song, Q., Min, J., ... & Zhao, J. (2024). Droplet impact dynamics on different wettable surfaces at moderate Weber numbers. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 695, 134250.