

DAFTAR PUSTAKA

- Accetta, K., Fellingner, R., Goncalves, P.L., Musselw, H.S., Pelt, W.P.V. (2013): Current Research in Egyptology 2013, *Proceedings of the Fourteen Annual Symposium*, United Kingdom.
- Ahmad, K. and Smalley, I.J. (1973): Observation of particle segregation in vibrated granular systems, *Powder Technology* **8**, 67-75.
- Al-Hashemi, H. M. B., dan Al-Amoudi, O. S. B. (2018): A review on the angle of repose of granular materials, *Powder Technology*, **330**, 397-417.
- Bérut, A., Pouliquen, O., dan Forterre, Y. (2019): Brownian Granular Flows Down Heaps, *Physical Review Letters*, **123**(24), 248005.
- Berzi, D., Jenkins, J. T., dan Richard, P. (2020): Extended kinetic theory for granular flow over and within an inclined erodible bed, *Journal of Fluid Mechanics*, **885**, 1-24.
- Bhattacharya, K.R., Sowbhagya, C.M., dan Indudhara, Y.M.S. (1972): Some physical properties of paddy and rice and their interrelations, *Journal of the Science of Food and Agriculture*. **23**, 171-186.
- Bird, R.B., Stewart, W.E., dan Lightfoot, E.N. (2001): *Transport Phenomena*, 2nd edition, John Wiley, New York.
- Bitter, J.G.A. (1963): A study of Erosion Phenomena Part I, *Wear*, **6**, 5-21.
- Collinson C. dan Roper, T. (1995): *Particle Mechanics*, London: Butterworth-Heinemann, London p. 30.
- Cheng, Y.-S. dan Yeh, H.-C. (1979): Particle bounce in cascade impactors, *Environment Science Technology* **13**, 1392-1396
- Dahneke, B. (1973): Measurements of bouncing of small latex spheres, *Journal of Colloid and Interface Science*, **45**(3), 584-590.
- Danbaba, N., Idakwo, P. Y., Kassum, A. L., Bristone, C., Bakare, S. O., Aliyu, U., ... dan Nkama, I (2019): Rice Postharvest Technology in Nigeria: An Overview of Current Status, Constraints and Potentials for Sustainable Development, *Open Access Library Journal*, **6**(8), 1-23.
- Duran, J. (2000): *Sands, Powders, and Grains An Introduction to the Physics of Granular Materials* (E. Guyon, Lam Lui, D. Langevin, and H. E. Stanley, Eds, New York, Springer-Verlag, 1-28.
- Dury, C. M., Ristow, G. H., Moss, J. L., dan Nakagawa, M. (1998): Boundary Effects on the Angle of Repose in Rotating Cylinders, *Physical Review E*, **57**(4), 4491-4497.
- Chen, J., Orozovic, O., Williams, K., Meng, J., dan Li, C. (2020): A coupled DEM-SPH model for moisture migration in unsaturated granular material under oscillation, *International Journal of Mechanical Sciences*, **169**, 105313.
- Cheng, Y. M., Fung, W. H. I., Li, L., dan Li, N. (2019): Laboratory and field tests and distinct element analysis of dry granular flows and segregation processes, *Natural Hazards and Earth System Sciences*, **19**(1), 181-199.
- Cuomo, S. (2020): Modelling of flowslides and debris avalanches in natural and engineered slopes: a review, *Geoenvironmental Disasters*, **7**(1), 1-25.
- Cosh, M. H., Jackson, T. J., Bindlish, R., Famiglietti, J. S., dan Ryu, D. (2005): Calibration of an impedance probe for estimation of surface soil water

- content over large regions, *Journal of Hydrology*, **311**(1–4), 49–58.
- Fang, N., Xu, R., Huang, L., Zhang, B., Duan, P., Li, N., dan Luo, Y., Li, Y. (2016): Small grain 11 controls grain size, grain number and grain yield in rice, *Rice* **9**(1:64), 1-11.
- Faug, T. (2015): Depth-averaged analytic solutions for free-surface granular flows impacting rigid walls down inclines, *Physical Review E*, **92**(6), 1–14.
- Ferdowsi, B., Ortiz, C. P., Houssais, M., dan Jerolmack, D. J. (2017): River-bed armouring as a granular segregation phenomenon, *Nature Communications*, **8**(1:1363), 1-10.
- Flagan, R.C. and Seinfeld, J.H. (1988): *Fundamentals of Air Pollution Engineering*, Prentice-Hall, New Jersey.
- Fouda, T. Z. (2011): Engineering Studies on the Performance of Paddy and Rice Separator, *AMA-Agricultural Mechanization in Asia Africa and Latin America*, **42**(2), 85.
- Gray, J. M. N. T. (2018): Particle segregation in dense granular flows, *Annual Review of Fluid Mechanics*, **50**, 407-433.
- Hajra, S. K., Bhattacharya, T., dan McCarthy, J. J. (2010): Improvement of granular mixing of dissimilar materials in rotating cylinders, *Powder Technology*, **198**(2), 175–182.
- Herminghaus, S. (2005): Dynamics of wet granular matter, *Advances in Physics*, **54**, 221–261.
- Hefler, C., Qiu, H., dan Shyy, W. (2018): Aerodynamic characteristics along the wing span of a dragonfly *Pantala flavescens*, *Journal Experiment Biology* **221**(19), jeb171199.
- Hinze, J.O. (1959): *Turbulence*. McGraw-Hill.
- Huang, A. N., dan Kuo, H. P. (2014): Developments in the tools for the investigation of mixing in particulate systems - A review, *Advanced Powder Technology*, **25**(1), 163–173.
- Issler, D., Gauer, P., Schaer, M., dan Keller, S. (2020): Inferences on Mixed Snow Avalanches from Field Observations, *Geosciences*, **10**(1), 2.
- Kammen, D. (2008): Rice and Circus in East Timor, *The Asia-Pacific Journal Japan Focus Volume*, **6**(8).
- Kudrolli, A. (2004): Size separation in vibrated granular matter, *Reports on progress in physics*, **67**(3), 209.
- Khakhar, D. V., Orpe, A. V., dan Hajra, S. K. (2003): Segregation of granular materials in rotating cylinders, *Physics A: Statistical Mechanics and Its Applications*, **318**(1–2), 129–136.
- Korkmaz, S., dan Ghaznawi, N. A. (2019): Numerical and Experimental Modeling of Flow Over a Broad-Crested Weir, *Sakarya University Journal of Science*, **23**(2), 252-258.
- Lecuona, A., Ruiz-Rivas, U., dan Nogueira, J. (2002): Simulation of particle trajectories in a vortex-induced flow: application to seed-dependent flow measurement techniques, *Measurement Science and Technology*, **13**(7), 1020.

- Li, L., Marteau, E., dan Andrade, J. E. (2019): Capturing the inter-particle force distribution in granular material using LS-DEM, *Granular Matter*, **21**(3), 43.
- Liang, H., He, S., dan Liu, W. (2020): Dynamic simulation of rockslide-debris flow based on an elastic-plastic framework using the SPH method, *Bulletin of Engineering Geology and the Environment*, **79**(1), 451-465.
- Liao, C. C., dan Hsiau, S. S. (2010): The granular mixing in a slurry rotating drum, *Proceedings of SPIE - The International Society for Optical Engineering*, **7522**, 1-8.
- Liao, C. C., Hsiau, S. S., dan Wen, S. F. (2015): Effect of adding a small amount of liquid on density-induced wet granular segregation in a rotating drum, *Advanced Powder Technology*, **27**(4), 1265-1271.
- Liu, X. Y., Specht, E., dan Mellmann, J. (2005): Experimental study of the lower and upper angles of repose of granular materials in rotating drums, *Powder Technology*, **154**(2-3), 125-131.
- Lu, Y., Shen, G. X., dan Lai, G. J. (2006): Dual leading-edge vortices on flapping wings, *Journal of Experimental Biology*, **209**(24), 5005-5016.
- Lumay, G., Boschini, F., Traina, K., Bontempi, S., Remy, J. C., Cloots, R., dan Vandewalle, N. (2012): Measuring the flowing properties of powders and grains, *Powder Technology*, **224**, 19-27.
- Mantravadi, B., dan Tan, D. S. (2020): Effect of bend angle on granular size segregation in the chute flow under periodic flow inversion, *Powder Technology*, **360**, 177-192.
- Maxey, M. R., dan Riley, J. J. (1983): Equation of motion for a small rigid sphere in a nonuniform flow, *The Physics of Fluids*, **26**(4), 883-889.
- Meer, V.D. D., Van Der Weele, K., Reimann, P., dan Lohse, D. (2007): Compartmentalized granular gases: flux model results, *Journal of Statistical Mechanics: Theory and Experiment*, **2007**(07), P07021.
- Meng, F., Meng, X., Hua, S., dan Ma, S. (2019): Fluctuation and self-diffusion research about dry granular materials under shearing, *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, **41**(3), 153.
- Minteh, M., Tchotang, T., Meva'a, L., and Kenmeugne, B. (2019): Assessment of the impact of preventive maintenance strategy on reliability indicators of a rice combine harvester in the Gambia, *Agricultural Engineering International: CIGR Journal*, **21**(1), 1-8.
- Mishra, S., Namdev, A., Namdev, A., Bisen, M., Bisen, M., ... dan Mishra, V. (2016): Segregation of Granular Material in Two and Three-Dimensional Units, *Resonance*, **21**(10), 1-12.
- Mitarai, N., dan Nakanishi, H. (2012): Granular flow: Dry and wet, *The European Physical Journal Special Topics*, **204**(1), 5-17.
- Muhammad, U. S., Abubakar, L. G., Isiaka, M., dan Davies, R. M. (2013): Design and evaluation of a cleaning machine, *Applied Science Reports, PSCI Publications*.
- Munir, R., Rahmayanti, H. D., Yuliza, E., Amalia, N., Utami, F. D., Viridi, S., dan Abdullah, M. (2019). Preliminary Study: Instrumentation Design for

- Studying Granular Segregation, *IOP Conference Series: Materials Science and Engineering*, **599**, (1), p. 012019.
- Möbius, M. E., Cheng, X., Eshuis, P., Karczmar, G. S., Nagel, S. R., dan Jaeger, H. M. (2005): Effect of air on granular size separation in a vibrated granular bed, *Physical Review E*, **72**(1), 011304.
- Pelesaraei, N.A., Rafiee, S., Mohtasebi, S. S., Hosseinzadeh-Bandbafha, H., dan Chau, K. W. (2019): Comprehensive model of energy, environmental impacts and economic in rice milling factories by coupling adaptive neuro-fuzzy inference system and life cycle assessment, *Journal of Cleaner Production*, **217**, 742-756
- Rashid, T. A. B., Zhu, L. T., dan Luo, Z. H. (2020): Effect of granular properties on hydrodynamics in coarse-grid riser flow simulation of Geldart A and B particles, *Powder Technology*, **359**, 126-144.
- Raju, N., Meiburga, E. (1997): Dynamics of small, spherical particles in vortical and stagnation point flow fields, *Physics Fluids*, **9** (2), 299-314.
- Rivas, N., Luding, S., dan Thornton, A. R. (2013): Low-frequency oscillations in narrow vibrated granular systems, *New Journal of Physics*, **15**(11), 113043.
- Sack, A., dan Pöschel, T. (2016): Dissipation of Energy by Dry Granular Matter in a Rotating Cylinder, *Scientific Reports*, **6**(5), 1–9.
- Scott, D. M., Davidson, J. F., Cheah, S. E., Chua, C., Gummow, J. G., Lam, B. P., dan Reder, I. (2008): Transient granular flows in an inclined rotating cylinder: filling and emptying, *Industrial & Engineering Chemistry Research*, **48**(1), 159-165.
- Shalev, ST. Dan Emily, EB. (2018): Gravity –Independent Grain Size Segregation in Experimental Granular Shear Flows as a Mechanism of Layer Formation, *Geophysical Research Letters* **45**(16) 8136-8144.
- Shrestha, K. P., Parajuli, P., Baral, B., dan Shrestha, B. P. (2017): Mathematical modeling, simulation and analysis of rice grain movement for design and fabrication of low-cost winnowing machine, *Journal of Mechanical Engineering Research*, **9**(1), 1-14.
- Sheng, L. T., Chang, W. C., dan Hsiau, S. S. (2016): Influence of particle surface roughness on creeping granular motion, *Physical Review E*, **94**(1), 1–12.
- Shimoska, A., Noursou, I., Shirakawa, Y., dan Hidaka, J. (2013): Effect of particle shape on size segregation of particles, *Chemical Engineering*, **32**, 2143-2148.
- Sultanbawa, F. M., Owens, W. G., dan Pandiella, S. S. (2001): A new approach to the prediction of particle separation by sieving in flour milling, *Food and Bioproducts Processing*, **79**(4), 211-218.
- Suryadi, M., dan Tiani, R. (2019): Explaining the Natural Materials of Traditional Kitchen Appliances In the Javanese Coastal Communities Based on Internal Structure Formation of Lingual Units, *Web of Conferences* **125**, p. 09010.
- Trinh, T., Boltenhagen, P., Delannay, R., dan Valance, A. (2017): Erosion and deposition processes in surface granular flows, *Physical Review E*, **96**(4), 1–11.
- Tunuguntla, D. R., Bokhove, O., dan Thornton, A. R. (2014): A mixture theory for size and density segregation in shallow granular free-surface flows, *Journal of Fluid Mechanics*, **749**, 99-112.
- Viridi, S., Schmick, M., dan Markus, M. (2006): Experimental observations of

- oscillations and segregation in a binary granular mixture. *Physical Review E*, **74**(4), 041301.
- Wall, S., John, W., Wang, H. C., dan Goren, S. L. (1990): Measurements of kinetic energy loss for particles impacting surfaces, *Aerosol Science and Technology*, **12**(4), 926-946.
- Wibowo, E., Rokhmat, M., Sutisna, Yuliza, E., Khairurrijal, dan Abdullah, M. (2016): The dynamics of a cylinder containing granules rolling down an inclined plane, *Powder Technology*, **301**, 44-57
- Wu, H., Gui, N., Yang, X., Tu, J., dan Jiang, S. (2016): Effects of particle size and region width on the mixing and dispersion of pebbles in two-region pebble bed, *Granular Matter*, **18**(4:76), 1-17.
- Yang, J., dan Luo, X. D. (2018): The critical state friction angle of granular materials: does it depend on grading?, *Acta Geotechnica*, **13**(3), 535–547.
- Yang, H., Li, R., Kong, P., Sun, Q. C., Biggs, M. J., dan Zivkovic, V. (2015): Avalanche dynamics of granular materials under the slumping regime in a rotating drum as revealed by speckle visibility spectroscopy, *Physical Review E*, **91**(4), 1–8.
- Yuliza, E., Amalia, N., Rahmayanti, H. D., Munir, R., Munir, M. M., Khairurrijal, K., dan Abdullah, M. (2018): Stability of granular tunnel, *Granular Matter*, **20**(4:75), 1-13.
- Xia, H., Li, Z., dan Tong, X. (2019): Modelling continuous materials using discrete element modelling: investigations on the effect of particle packing, *Computational Particle Mechanics*, **6**(4), 823-836.
- Xiao, H., Fan, Y., Jacob, K. V., Umbanhowar, P. B., Kodam, M., Koch, J. F., dan Lueptow, R. M. (2019): Continuum modeling of granular segregation during hopper discharge, *Chemical Engineering Science*, **193**, 188-204.
- Zhao, L. L., Li, Y. W., Yang, X. D., Jiao, Y., dan Hou, Q. F. (2019): DEM study of size segregation of wet particles under vertical vibration, *Advanced Powder Technology*, **30**(7), 1386-1399.