

DAFTAR PUSTAKA

- Agustin, A., Saputri, A.I., dan Harianingsih. 2017. Optimasi Pembuatan Karagenan dari Rumput Laut dan Aplikasinya untuk Perenyah Biskuit. *Inovasi Teknik Kimia*. 2(2): 42-47.
- Akhavan-Kharazian, N., & Izadi-Vasafi, H. 2019. Preparation and characterization of chitosan/gelatin/nanocrystalline cellulose/calcium peroxide films for potential wound dressing applications. *International journal of biological macromolecules*. 133: 881-891.
- Alba, K., & Kontogiorgos, V. 2018. *Seaweed polysaccharides (agar, alginate carrageenan)*. Elsevier
- Alizadeh-Sani, M., Tavassoli, M., Mohammadian, E., Ehsani, A., Khaniki, G. J., Priyadarshi, R., & Rhim, J. W. 2021. pH-responsive color indicator films based on methylcellulose/chitosan nanofiber and barberry anthocyanins for real-time monitoring of meat freshness. *International Journal of Biological Macromolecules*. 166 : 741-750.
- Amin, S., Ruswanto, dan Negoro, Y.I. 2014. Analisis Minyak Atsiri Umbi Bawang Putih (*Allium sativum* Linn.) Menggunakan Kromatografi Gas Spektrometer Massa. *Jurnal Kesehatan Bakti Tunas Husada*. 11(1): 37-45
- Aznury, M. 2019. Mechanical Properties of Bioplastics Product from Musa Paradisica Formatypica Concentrate with Plasticizer Variables. In *Journal of Physics: Conference Series*. 1167 (1): 1-7.
- Badan Standarisasi Nasional. 2008. *Mutu Karkas Daging Sapi*. SNI 3932 : 2008. BSN : Jakarta
- Bajpai, P. (2019). *Biobased polymers: properties and applications in packaging*. Elsevier.
- Barman, K., Sharma, S., & Siddiqui, M. W. (Eds.). 2018. *Emerging postharvest treatment of fruits and vegetables*. CRC Press.
- Biao, Y., Yuxuan, C., Qi, T., Ziqi, Y., Yourong, Z., McClements, D. J., & Chongjiang, C. 2019. Enhanced performance and functionality of active edible films by incorporating tea polyphenols into thin calcium alginate hydrogels. *Food Hydrocolloids*. 97 : 105197.
- BPS. 2020. *Distribusi Perdagangan Komoditas Daging Sapi di Indonesia 2019*. Badan Pusat Statistik RI : Jakarta
- Carissimi, M., Flôres, S. H., dan Rech, R. 2018. Effect of Microalgae Addition on Active Biodegradable Starch Film. *Algal research*. 32: 201-209.
- Chellaiah, R., Shanmugasundaram, M., & Kizhekkedath, J. 2020. Advances in Meat Preservation and Safety. *International Journal of Science and Research*. 9(3): 1499-1502
- Chen, C., Liu, C. H., Cai, J., Zhang, W., Qi, W. L., Wang, Z. & Yang, Y. 2018. Broad-spectrum antimicrobial activity, chemical composition and mechanism of action of garlic (*Allium sativum*) extracts. *Food Control*. 86 : 117-125.

- Choudhury, I., & Hashmi, M. S. J. 2020. *Encyclopedia of renewable and sustainable materials*. Elsevier.
- Cruz, R. M., Khmelinskii, I., & Vieira, M. (Eds.). 2014. *Methods in food analysis*. CRC Press.
- da Rosa, G. S., Vanga, S. K., Gariepy, Y., & Raghavan, V. 2020. Development of biodegradable films with improved antioxidant properties based on the addition of carrageenan containing olive leaf extract for food packaging applications. *Journal of Polymers and the Environment*. 28(1) : 123-130.
- Dehariya, N., Guha, P., dan Gupta, R.K. 2021. Extraction and Characterization of Essential Oil of Garlic (*Allium sativa L.*). *International Journal of Chemical Studies*. 9(1): 1455-1459.
- Devine, C., & Dikeman, M. (Eds.). 2014. *Encyclopedia of meat sciences*. Elsevier.
- Díaz, A. V., & García-Gimeno, R. M. (Eds.). 2018. *Descriptive Food Science*. BoD—Books on Demand.
- Dong, Y., Wei, Z., & Xue, C. 2021. Recent advances in carrageenan-based delivery systems for bioactive ingredients: A review. *Trends in Food Science & Technology*. 112 : 348-361.
- Ebrahimi, S., Fathi, M., & Kadivar, M. 2019. Production and characterization of chitosan-gelatin nanofibers by nozzle-less electrospinning and their application to enhance edible film's properties. *Food Packaging and Shelf Life*. 22 : 100387.
- Esmaeili, H., Cheraghi, N., Khanjari, A., Rezaeigolestani, M., Basti, A. A., Kamkar, A., & Aghaee, E. M. 2020. Incorporation of nanoencapsulated garlic essential oil into edible films: A novel approach for extending shelf life of vacuum-packed sausages. *Meat Science*. 166 : 108135.
- Fakhouri, F. M., Martelli, S. M., Caon, T., Velasco, J. I., Buontempo, R. C., Bilck, A. P., & Mei, L. H. I. 2018. The effect of fatty acids on the physicochemical properties of edible films composed of gelatin and gluten proteins. *LWT*. 87 : 293-300
- Fan, X., Niemira, B. A., Doona, C. J., Feeherry, F. E., & Gravani, R. B. (Eds.). 2009. *Microbial safety of fresh produce* (Vol. 41). John Wiley & Sons.
- Febianti, M., Ghozali, A. A., Redjeki, S., dan Iriani, I. 2020. Edible Film dari Tepung Kappa Karagenan dan Kitosan Cangkang Rajungan dengan Gliserol. *ChemPro*. 1 (1): 16-21.
- Gaonkar, A. G., & McPherson, A. 2016. *Ingredient interactions: effects on food quality*. CRC press.
- Gofur, A., Wulandari, I., Arifah, S.N., Athoillah, M.F., Witjoro, A., dan Lestari, S.R. 2019. Single Clove Garlic (*Allium sativum*) Essential Oil as an Inhibitor of *Staphylococcus aureus* Bacteria. *Journal of Biology & Biology Education*. 11(1). 77-83.
- Gustavsson, J., C. Cederberg, dan U. Sonesson, R.V. Otterdijk, dan A. Meybeck. 2011. *Global Food Losses and Food Waste*. Food and Agriculture Organization of the United Nations. Roma.

- Gutiérrez, T. J., & Álvarez, K. 2016. Physico-chemical properties and in vitro digestibility of edible films made from plantain flour with added Aloe vera gel. *Journal of Functional Foods.* 26 : 750-762.
- Hawthorne, L. M., Beganović, A., Schwarz, M., Noordanus, A. W., Prem, M., Zapf, L., Scheibel, S., Margreiter, G., Huck, C. W., & Bach, K. 2020. Suitability of Biodegradable Materials in Comparison with Conventional Packaging Materials for the Storage of Fresh Pork Products over Extended Shelf-Life Periods. *Foods.* 9(12): 1-23
- Inamuddin, A. M., Ahamed, M. I., & Boddula, R. 2021. *Polysaccharides : Properties and Applications.* Elsevier.
- Jafari, S. M. (Ed.). 2021. *Postharvest and Postmortem Processing of Raw Food Materials: Unit Operations and Processing Equipment in the Food Industry.* Woodhead Publishing.
- Jridi, M., Abdelhedi, O., Salem, A., Kechaou, H., Nasri, M., & Menchari, Y. 2020. Physicochemical, antioxidant and antibacterial properties of fish gelatin-based edible films enriched with orange peel pectin: Wrapping application. *Food Hydrocolloids.* 103 : 105688.
- Katiyo, W., de Kock, H. L., Coorey, R., & Buys, E. M. 2020. Sensory implications of chicken meat spoilage in relation to microbial and physicochemical characteristics during refrigerated storage. *Lwt.* 128 : 109468.
- Lagrain, B., Goderis, B., Brijs, K., & Delcour, J. A. 2010. Molecular basis of processing wheat gluten toward biobased materials. *Biomacromolecules.* 11(3) : 533-541.
- Malik, A., Erginkaya, Z., Ahmad, S., & Erten, H. (Eds.). 2014. *Food processing: strategies for quality assessment.* Springer.
- Mallick, N., Pal, D., Soni, A. B., Jhariya, D. C., & Singh, D. 2020. Starch based antimicrobial food packaging film towards a sustainable environment. In IOP Conference Series: Earth and Environmental Science. 597 (1): 1-6
- Nata, I. F., Irawan, C., Adawiyah, M., & Ariwibowo, S. 2020. Edible film cassava starch/eggshell powder composite containing antioxidant: preparation and characterization. In *IOP Conference Series: Earth and Environmental Science* (Vol. 524, No. 1, p. 012008). IOP Publishing.
- Nollet, L. M., & Toldrá, F. (Eds.). 2008. *Handbook of processed meats and poultry analysis.* CRC Press.
- Odeyemi, O. A., Alegbeleye, O. O., Strateva, M., & Stratev, D. 2020. Understanding spoilage microbial community and spoilage mechanisms in foods of animal origin. *Comprehensive reviews in food science and food safety.* 19(2) : 311-331.
- Olaoye, O.A. 2011. Mini Review, Meat: An Overview of It's Composition, Biochemical Changes and Associated Microbial Agents. *International Food Research Journal.* 18(3): 877-885.

- Oun, A. A., & Rhim, J. W. 2017. Carrageenan-based hydrogels and films: Effect of ZnO and CuO nanoparticles on the physical, mechanical, and antimicrobial properties. *Food Hydrocolloids.* 67 : 45-53.
- Pal, K., Banerjee, I., Sarkar, P., Kim, D., Deng, W. P., Dubey, N. K., & Majumder, K. (Eds.). 2020. *Biopolymer-based formulations: biomedical and food applications.* Elsevier.
- Pereira, L. A. S., Silva, P. D. C., Pagnossa, J. P., Miranda, K. W. E., Medeiros, E. S., Piccoli, R. H., & Oliveira, J. E. D. 2019. Antimicrobial zein coatings plasticized with garlic and thyme essential oils. *Brazilian Journal of Food Technology.* 22.
- Pranoto, Y., Salokhe, V. M., & Rakshit, S. K. 2005. Physical and antibacterial properties of alginate-based edible film incorporated with garlic oil. *Food research international.* 38(3) : 267-272.
- Prihastuti, D. dan Abdassah, M. 2019. Karagenan dan Aplikasinya di Bidang Farmasetik. *Majalah Farmasetika.* 4(5): 147-155.
- Radic, Z.S., Matejic, J., dan Radulovic, N. 2013. *Recent Progress in Medicinal Plants.* Studium Press LLC. Houston
- Ramli, A. N. M., Manap, N. W. A., Bhuyar, P., & Azelee, N. I. W. 2020. Passion fruit (*Passiflora edulis*) peel powder extract and its application towards antibacterial and antioxidant activity on the preserved meat products. *SN Applied Sciences.* 2(10) : 1-11.
- Razavi, S. M. (Ed.). 2019. *Emerging natural hydrocolloids: rheology and functions.* John Wiley & Sons.
- Ren, B., Wu, W., Soladoye, O.P., Bak, K.H., Fu, Y., dan Zhang, Y. 2021. Application of Biopreservatives in Meat Preservation: A Review. *International Journal of Food Science and Technology.* 1-18.
- Rusianto, T., Yuniwati, M., dan Wibowo, H. 2018. Effect Carrageenan to Biodegradable Plastic from Tubers. *Jurnal Bahan Alam Terbarukan.* 8(2): 148-155
- Saadi, S., Saari, N., Ghazali, H. M., Abdulkarim, S. M., Hamid, A. A., & Anwar, F. 2021. Gluten proteins: Enzymatic modification, functional and therapeutic properties. *Journal of Proteomics* : 104395.
- Sartori, T., Feltre, G., do Amaral Sobral, P. J., da Cunha, R. L., & Menegalli, F. C. 2018. Properties of films produced from blends of pectin and gluten. *Food packaging and shelf life.* 18 : 221-229.
- Shivangi, S., Dorairaj, D., Negi, P. S., & Shetty, N. P. 2021. Development and characterisation of a pectin-based edible film that contains mulberry leaf extract and its bio-active components. *Food Hydrocolloids.* 121 : 107046.
- Thakur, R., Pristijono, P., Golding, J. B., Stathopoulos, C. E., Scarlett, C., Bowyer, M., & Vuong, Q. V. 2018. Effect of starch physiology, gelatinization, and retrogradation on the attributes of rice starch-*t*-carrageenan film. *Starch-Stärke.* 70(1-2) : 1700099.

- Thakur, R., Saberi, B., Pristijono, P., Golding, J., Stathopoulos, C., Scarlett, C., & Vuong, Q. 2016. Characterization of rice starch- τ -carrageenan biodegradable edible film. Effect of stearic acid on the film properties. *International Journal of Biological Macromolecules*. 93 : 952-960.
- Thomas, S., Pius, A., & Gopi, S. (Eds.). 2020. *Handbook of Chitin and Chitosan: Volume 2: Composites and Nanocomposites from Chitin and Chitosan, Manufacturing and Characterisations*. Elsevier.
- Torpol, K., Wiriyacharee, P., Sriwattana, S., Sangsuwan, J., & Prinyawiwatkul, W. 2018. Antimicrobial activity of garlic (*Allium sativum L.*) and holy basil (*Ocimum sanctum L.*) essential oils applied by liquid vs. vapour phases. *International Journal of Food Science & Technology*. 53(9) : 2119-2128.
- Var, I., & Uzunlu, S. (Eds.). 2019. *Active antimicrobial food packaging*. BoD—Books on Demand.
- Wan, N. H. B. C., Nafchi, A. M., dan Huda, N. 2018. Film Opacity, Water Vapor Permeability, Water Solubility and Fourier Transform Infrared Radiation (FTIR) of a Biodegradable Film Based on a Duck Feet Gelatin and Polyvinyl Alcohol Blend. *Asia Pacific Journal of Sustainable Agriculture, Food and Energy*. 6 (2): 10-15.
- Wehrli, M. C., Kratky, T., Schopf, M., Scherf, K. A., Becker, T., & Jekle, M. 2021. Thermally induced gluten modification observed with rheology and spectroscopies. *International journal of biological macromolecules*. 173 : 26-33.
- Wilpiszewska, K., Antosik, A. K., dan Zdanowicz, M. 2019. The Effect of Citric Acid on Physicochemical Properties of Hydrophilic Carboxymethyl Starch-Based Films. *Journal of Polymers and the Environment*. 27 (6): 1379-1387.
- Yolanda, D.S., Dirpan, A., Rahman, A.N.F., Djalal, M., dan Hidayat, S.H. 2020. The Potential Combination of Smart and Active Packaging in One Packaging System in Improving and Maintaining the Quality of Fish. *Canrea Journal: Food and Technology, Nutritions, and Culinary*. 3(2): 74-86
- Zhou, Y., Wu, X., Chen, J., & He, J. 2021. Effects of cinnamon essential oil on the physical, mechanical, structural and thermal properties of cassava starch-based edible films. *International Journal of Biological Macromolecules*. 184 : 574-583.