



DAFTAR PUSTAKA

- Abu Salha, B., & Gedanken, A. (2021). Extending the Shelf Life of Strawberries by the Sonochemical Coating of their Surface with Nanoparticles of an Edible Anti-Bacterial Compound. *Applied Nano*, 2(1), 14–24. <https://doi.org/10.3390/applnano2010002>
- Aday, Mehmet Seckin, Büyükan, M. B., Temizkan, R., & Caner, C. (2014). Role of Ozone Concentrations and Exposure Times in Extending Shelf Life of Strawberry. *Ozone: Science and Engineering*, 36(1), 43–56. <https://doi.org/10.1080/01919512.2013.833851>
- Aday, Mehmet Seckin, & Caner, C. (2011). The Applications of ‘Active Packaging and Chlorine Dioxide’ for Extended Shelf Life of Fresh Strawberries. *Packaging and Technology and Science*, 24(October), 123–136. <https://doi.org/10.1002/pts>
- Affan, F. F. M., Yuliastuti, P., Aldila, L. E., & Jumeri, M. (2018). Controlled temperatures and edible coating treatments on fresh strawberry (*Fragaria sp. ’Holibrite’*) in a tropical environment. *Acta Horticulturae*, 1201, 7–14. <https://doi.org/10.17660/ActaHortic.2018.1201.2>
- Aghdam, M. S., Jannatizadeh, A., Luo, Z., & Paliyath, G. (2018). Ensuring sufficient intracellular ATP supplying and friendly extracellular ATP signaling attenuates stresses, delays senescence and maintains quality in horticultural crops during postharvest life. *Trends in Food Science and Technology*, 76(September 2017), 67–81. <https://doi.org/10.1016/j.tifs.2018.04.003>
- Ahmadnia, M., Sadeghi, M., Abbaszadeh, R., & Ghomi Marzdashti, H. R. (2021). Decontamination of whole strawberry via dielectric barrier discharge cold plasma and effects on quality attributes. *Journal of Food Processing and Preservation*, 45(1), 1–10. <https://doi.org/10.1111/jfpp.15019>
- Amil-Ruiz, F., Blanco-Portales, R., Muñoz-Blanco, J., & Caballero, J. L. (2011). The strawberry plant defense mechanism: A molecular review. *Plant and Cell Physiology*, 52(11), 1873–1903. <https://doi.org/10.1093/pcp/pcr136>
- Amiri, A., Sourestani, M. M., Mortazavi, S. M. H., Kiasat, A. R., & Ramezani, Z. (2022). Efficiency of chemical composition of some essential oils against *Botrytis cinerea*, the pathogen of post-harvest strawberry fruits. *Journal of Food Measurement and Characterization*, 16(1), 66–75. <https://doi.org/10.1007/s11694-021-01133-z>
- Asami, D. K., Hong, Y.-J., Barrett, D. M., & Mitchell, A. E. (2003). Comparison of the Total Phenolic and Ascorbic Acid Content of Freeze-Dried and Air-Dried Marionberry , Strawberry , and Corn Grown Using Conventional , Organic , and Sustainable Agricultural Practices. *Journal of Agricultural and Food Chemistry*, 51, 1237–1241.
- Bang, I. H., Kim, Y. E., & Min, S. C. (2021). Preservation of mandarins using a microbial decontamination system integrating calcium oxide solution



washing, modified atmosphere packaging, and dielectric barrier discharge cold plasma treatment. *Food Packaging and Shelf Life*, 29(April), 100682. <https://doi.org/10.1016/j.fpsl.2021.100682>

Basu, A., Nguyen, A., Betts, N. M., & Lyons, T. J. (2014). Strawberry As a Functional Food: An Evidence-Based Review. *Critical Reviews in Food Science and Nutrition*, 54(6), 790–806. <https://doi.org/10.1080/10408398.2011.608174>

Bolshakov, A. A., Cruden, B. A., Mogul, R., Rao, M. V. V. S., Sharma, S. P., Khare, B. N., & Meyyappan, M. (2003). Emission from oxygen plasma as a sterilization source: An analysis. *34th AIAA Plasmadynamics and Lasers Conference*, 42(4), 823–832. <https://doi.org/10.2514/6.2003-4034>

Cao, S., Hu, Z., Pang, B., Wang, H., Xie, H., & Wu, F. (2010). Effect of ultrasound treatment on fruit decay and quality maintenance in strawberry after harvest. *Food Control*, 21(4), 529–532. <https://doi.org/10.1016/j.foodcont.2009.08.002>

Cassidy, A., O'Reilly, É. J., Kay, C., Sampson, L., Franz, M., Forman, J. P., Curhan, G., & Rimm, E. B. (2011). Habitual intake of flavonoid subclasses and incident hypertension in adults. *American Journal of Clinical Nutrition*, 93(2), 338–347. <https://doi.org/10.3945/ajcn.110.006783>

Cetin, M. H., Ozcelik, B., Kuram, E., & Demirbas, E. (2011). Evaluation of vegetable based cutting fluids with extreme pressure and cutting parameters in turning of AISI 304L by Taguchi method. *Journal of Cleaner Production*, 19(17–18), 2049–2056. <https://doi.org/10.1016/j.jclepro.2011.07.013>

Chang, R., Lu, H., Tian, Y., Li, H., Wang, J., & Jin, Z. (2020). Structural modification and functional improvement of starch nanoparticles using vacuum cold plasma. *International Journal of Biological Macromolecules*, 145, 197–206. <https://doi.org/10.1016/j.ijbiomac.2019.12.167>

Chi, Y., Yang, P., Ren, S., & Yang, J. (2023). Inhibition of cell wall pectin metabolism by plasma activated water (PAW) to maintain firmness and quality of postharvest blueberry. *Plant Physiology and Biochemistry*, 5, 107803. <https://doi.org/10.1016/j.msec.2022.112712>

Contigiani, E. V., Jaramillo-Sánchez, G., Castro, M. A., Gómez, P. L., & Alzamora, S. M. (2018). Postharvest Quality of Strawberry Fruit (*Fragaria x Ananassa Duch* cv. Albion) as Affected by Ozone Washing: Fungal Spoilage, Mechanical Properties, and Structure. *Food and Bioprocess Technology*, 11(9), 1639–1650. <https://doi.org/10.1007/s11947-018-2127-0>

D'Souza, A. D., Rao, S. S., & Herbert, M. A. (2021). Taguchi method of optimization of process variables for ultimate tensile strength of friction stir welded joint of Al-Ce-Si-Mg aluminium alloy plates. *Materials Today: Proceedings*, 46, 2691–2698. <https://doi.org/10.1016/j.matpr.2021.02.391>

Dantas, A. M., Batista, J. D. F., dos Santos Lima, M., Fernandes, F. A. N., Rodrigues, S., Magnani, M., & Borges, G. da S. C. (2021). Effect of cold plasma on açai pulp: Enzymatic activity, color and bioaccessibility of phenolic compounds. *Lwt*, 149(November 2020).



<https://doi.org/10.1016/j.lwt.2021.111883>

- Darvish, H., Ramezan, Y., Khani, M. R., & Kamkari, A. (2022). Effect of low-pressure cold plasma processing on decontamination and quality attributes of Saffron (*Crocus sativus L.*). *Food Science and Nutrition*, 10(6), 2082–2090. <https://doi.org/10.1002/fsn3.2824>
- do Rosário, D. K. A., da Silva Mutz, Y., Peixoto, J. M. C., Oliveira, S. B. S., de Carvalho, R. V., Carneiro, J. C. S., de São José, J. F. B., & Bernardes, P. C. (2017). Ultrasound improves chemical reduction of natural contaminant microbiota and *Salmonella enterica* subsp. *enterica* on strawberries. *International Journal of Food Microbiology*, 241, 23–29. <https://doi.org/10.1016/j.ijfoodmicro.2016.10.009>
- Duan, Z., Duan, W., Li, F., Li, Y., Luo, P., & Liu, H. (2019). Effect of carboxymethylation on properties of fucoidan from *Laminaria japonica*: Antioxidant activity and preservative effect on strawberry during cold storage. *Postharvest Biology and Technology*, 151(November 2018), 127–133. <https://doi.org/10.1016/j.postharvbio.2019.02.008>
- Falah, M. A. F., Husna, H., Dewi, A. R. P. A., & Jumeri. (2016). Quality evaluation of fresh strawberry (*Fragaria* sp. cv. Earlybrite) during storage in a tropical environment. *AIP Conference Proceedings*, 1755(July 2016). <https://doi.org/10.1063/1.4958547>
- Falah, M. A. F., Jumeri, P. Y., & Khuriyati, N. (2018). Quality and shelf-life improvement of fresh strawberry (*Fragaria* sp. ‘Holibrite’) using Aloe vera coating during storage in a tropical environment. *Acta Horticulturae*, 1194, 665–672. <https://doi.org/10.17660/ActaHortic.2018.1194.95>
- Figueroa, C. R., Rosli, H. G., Civello, P. M., Martinez, G. A., Herrera, R., & Moya-Leon, M. A. (2010). Changes in cell wall polysaccharides and cell wall degrading enzymes during ripening of *Fragaria chiloensis* and *Fragaria x ananassa* fruits Carlos. *Scientia Horticulturae*, 124, 454–462. <https://doi.org/10.1016/j.scienta.2010.02.003>
- Freedman, N. D., Park, Y., Subar, A. F., Hollenbeck, A. R., Leitzmann, M. F., Schatzkin, A., & Abnet, C. C. (2007). Fruit and vegetable intake and esophageal cancer in a large prospective cohort study. *International Journal of Cancer*, 121(12), 2753–2760. <https://doi.org/10.1002/ijc.22993>
- Freedman, N. D., Park, Y., Subar, A. F., Hollenbeck, A. R., Leitzmann, M. F., Schatzkin, A., & Abnet, C. C. (2008). Fruit and vegetable intake and head and neck cancer risk in a large United States prospective cohort study. *International Journal of Cancer*, 122(10), 2330–2336. <https://doi.org/10.1002/ijc.23319>
- Ghosh, S., Gillis, A., Levkov, K., Vitkin, E., & Golberg, A. (2020). Saving energy on meat air convection drying with pulsed electric field coupled to mechanical press water removal. *Innovative Food Science and Emerging Technologies*, 66(9), 102509. <https://doi.org/10.1016/j.ifset.2020.102509>
- Giampieri, F., Forbes-Hernandez, T. Y., Gasparrini, M., Alvarez-Suarez, J. M., Afrin, S., Bompadre, S., Quiles, J. L., Mezzetti, B., & Battino, M. (2015).



Strawberry as a health promoter: An evidence based review. *Food and Function*, 6(5), 1386–1398. <https://doi.org/10.1039/c5fo00147a>

Giannoglou, M., Xanthou, Z. M., Chanioti, S., Stergiou, P., Christopoulos, M., Dimitrakellis, P., Efthimiadou, A., Gogolides, E., & Katsaros, G. (2021). Effect of cold atmospheric plasma and pulsed electromagnetic fields on strawberry quality and shelf-life. *Innovative Food Science and Emerging Technologies*, 68(November 2020). <https://doi.org/10.1016/j.ifset.2021.102631>

Gómez-Aldapa, C. A., Portillo-Torres, L. A., Villagómez-Ibarra, J. R., Rangel-Vargas, E., Téllez-Jurado, A., Cruz-Gálvez, A. M., & Castro-Rosas, J. (2018). Survival of foodborne bacteria on strawberries and antibacterial activities of Hibiscus sabdariffa extracts and chemical sanitizers on strawberries. *Journal of Food Safety*, 38(1). <https://doi.org/10.1111/jfs.12378>

Hannum, S. M. (2004). Potential Impact of Strawberries on Human Health: A Review of the Science. *Critical Reviews in Food Science and Nutrition*, 44(1), 1–17. <https://doi.org/10.1080/10408690490263756>

Hartmann, A., Patz, C.-D., Andlauer, W., Dietrich, H., & Ludwig, M. (2008). Influence of Processing on Quality Parameters of Strawberries. *Journal of Agricultural and Food Chemistry*, 56, 9484–9489.

Hosseini, S. I., Farrokhi, N., Shokri, K., Khani, M. R., & Shokri, B. (2018). Cold low pressure O₂ plasma treatment of Crocus sativus: An efficient way to eliminate toxicogenic fungi with minor effect on molecular and cellular properties of saffron. *Food Chemistry*, 257(March), 310–315. <https://doi.org/10.1016/j.foodchem.2018.03.031>

Huang, Y., & Chen, H. (2015). Inactivation of Escherichia coli O157:H7, Salmonella and human norovirus surrogate on artificially contaminated strawberries and raspberries by water-assisted pulsed light treatment. *Food Research International*, 72, 1–7. <https://doi.org/10.1016/j.foodres.2015.03.013>

Hyang-Lan, E., Seung-Hyun, H., & Eun-Jin, L. (2021). High-CO₂ Treatment Prolongs the Postharvest Shelf Life of Strawberry Fruits by Reducing Decay and Cell Wall Degradation. *Foods*, 10, 1649.

Inselberg, H., & do Nascimento Nunes, M. C. (2021). Using Cannabidiol as a potential postharvest treatment to maintain quality and extend the shelf life of strawberries. *Postharvest Biology and Technology*, 173(November 2020), 111416. <https://doi.org/10.1016/j.postharvbio.2020.111416>

Jafarzadeh, S., Mohammadi Nafchi, A., Salehabadi, A., Oladzad-abbasabadi, N., & Jafari, S. M. (2021). Application of bio-nanocomposite films and edible coatings for extending the shelf life of fresh fruits and vegetables. *Advances in Colloid and Interface Science*, 291, 102405. <https://doi.org/10.1016/j.cis.2021.102405>

Jannatizadeh, A., Aghdam, M. S., Farmani, B., Maggi, F., & Morshedloo, M. R. (2018). β -Aminobutyric acid treatment confers decay tolerance in strawberry fruit by warranting sufficient cellular energy providing. *Scientia*



Horticulturae, 240(May), 249–257.
<https://doi.org/10.1016/j.scienta.2018.06.048>

- Jetti, R. R., Yang, E., Kurnianta, A., Finn, C., & Qian, M. C. (2007). Quantification of selected aroma-active compounds in strawberries by headspace solid-phase microextraction gas chromatography and correlation with sensory descriptive analysis. *Journal of Food Science*, 72(7). <https://doi.org/10.1111/j.1750-3841.2007.00445.x>
- Ji, Y., Hu, W., Liao, J., Jiang, A., Xiu, Z., Gaowa, S., Guan, Y., Yang, X., Feng, K., & Liu, C. (2020). Effect of atmospheric cold plasma treatment on antioxidant activities and reactive oxygen species production in postharvest blueberries during storage. *Journal of the Science of Food and Agriculture*, 100(15), 5586–5595. <https://doi.org/10.1002/jsfa.10611>
- Kashfi, A. S., Ramezan, Y., & Khani, M. R. (2020). Simultaneous study of the antioxidant activity, microbial decontamination and color of dried peppermint (*Mentha piperita* L.) using low pressure cold plasma. *Lwt*, 123(August 2019). <https://doi.org/10.1016/j.lwt.2020.109121>
- Khan, M. S. I., & Kim, Y. J. (2020). Dielectric barrier discharge (DBD) plasma induced flavonoid degradation kinetics and mechanism in water. *Lwt*, 118(June 2019), 108777. <https://doi.org/10.1016/j.lwt.2019.108777>
- Khani, M. R., Shokri, B., & Khajeh, K. (2017). Studying the performance of dielectric barrier discharge and gliding arc plasma reactors in tomato peroxidase inactivation. *Journal of Food Engineering*, 197, 107–112. <https://doi.org/10.1016/j.jfoodeng.2016.11.012>
- Khodabandeh, M., Azizi, M., Shokri, B., Bahreini, M., Rezadoost, H., & Salehi, M. (2023). Optimization of the Radiofrequency Low - Pressure Cold Plasma Conditions for Decontamination of Saffrons. *Food and Bioprocess Technology*, 1, 1–27. <https://doi.org/10.1007/s11947-023-03112-2>
- Kudra, T., & Strumillo, C. (2014). Thermal Processing of Bio-Materials. In *Engineering & Technology, Physical Sciences* (1st ed.). CRC Press. <https://doi.org/https://doi.org/10.1201/9781482287387>
- Kumar, S., & Neogi, S. (2009). Inactivation characteristics of bacteria in capacitively coupled argon plasma. *IEEE Transactions on Plasma Science*, 37(12), 2347–2352. <https://doi.org/10.1109/TPS.2009.2033112>
- Lacombe, A., Niemira, B. A., Gurtler, J. B., Fan, X., Sites, J., Boyd, G., & Chen, H. (2015). Atmospheric cold plasma inactivation of aerobic microorganisms on blueberries and effects on quality attributes. *Food Microbiology*, 46, 479–484. <https://doi.org/10.1016/j.fm.2014.09.010>
- Lafarga, Tomás, Acién-Fernández, F. G., & García-Vaquero, M. (2020). Bioactive peptides and carbohydrates from seaweed for food applications: Natural occurrence, isolation, purification, and identification. *Algal Research*, 48(1), 101909. <https://doi.org/10.1016/j.algal.2020.101909>
- Lafarga, Tomás, Colás-Medà, P., Abadías, M., Aguiló-Aguayo, I., Bobo, G., & Viñas, I. (2019). Strategies to reduce microbial risk and improve quality of

fresh and processed strawberries: A review. *Innovative Food Science and Emerging Technologies*, 52(November 2018), 197–212.
<https://doi.org/10.1016/j.ifset.2018.12.012>

Lan, W., Zhang, R., Ahmed, S., Qin, W., & Liu, Y. (2019). Effects of various antimicrobial polyvinyl alcohol/tea polyphenol composite films on the shelf life of packaged strawberries. *Lwt*, 113(June), 108297.
<https://doi.org/10.1016/j.lwt.2019.108297>

Laroque, D. A., Seó, S. T., Valencia, G. A., Laurindo, J. B., & Carciofi, B. A. M. (2022). Cold plasma in food processing: Design, mechanisms, and application. *Journal of Food Engineering*, 312(April 2021).
<https://doi.org/10.1016/j.jfoodeng.2021.110748>

Laroussi, M. (2005). Low temperature plasma-based sterilization: Overview and state-of-the-art. *Plasma Processes and Polymers*, 2(5), 391–400.
<https://doi.org/10.1002/ppap.200400078>

Li, M., Li, X., Han, C., Ji, N., Jin, P., & Zheng, Y. (2019). Physiological and Metabolomic Analysis of Cold Plasma Treated Fresh-Cut Strawberries. *Journal of Agricultural and Food Chemistry*, 67(14), 4043–4053.
<https://doi.org/10.1021/acs.jafc.9b00656>

Li, Y., Dong, Q., Chen, J., & Li, L. (2020). Effects of coaxial electrospun eugenol loaded core-sheath PVP/shellac fibrous films on postharvest quality and shelf life of strawberries. *Postharvest Biology and Technology*, 159(September 2019). <https://doi.org/10.1016/j.postharvbio.2019.111028>

Lou, B. S., Lai, C. H., Chu, T. P., Hsieh, J. H., Chen, C. M., Su, Y. M., Hou, C. W., Chou, P. Y., & Lee, J. W. (2019). Parameters affecting the antimicrobial properties of cold atmospheric plasma jet. *Journal of Clinical Medicine*, 8(11). <https://doi.org/10.3390/jcm8111930>

Mao, L., Mhaske, P., Zing, X., Kasapis, S., Majzoobi, M., & Farahnaky, A. (2021). Cold plasma: Microbial inactivation and effects on quality attributes of fresh and minimally processed fruits and Ready-To-Eat vegetables. *Trends in Food Science and Technology*, 116(January), 146–175.
<https://doi.org/10.1016/j.tifs.2021.07.002>

Martos, G. G., Mamaní, A., Filippone, M. P., Castagnaro, A. P., & Díaz Ricci, J. C. (2018). The ellagitannin HeT induces electrolyte leakage, calcium influx and the accumulation of nitric oxide and hydrogen peroxide in strawberry. *Plant Physiology and Biochemistry*, 123, 400–405.
<https://doi.org/10.1016/j.plaphy.2017.12.035>

Méndez-Yáñez, Á., Beltrán, D., Campano-Romero, C., Molinett, S., Herrera, R., Moya-León, M. A., & Morales-Quintana, L. (2017). Glycosylation is important for FcXTH1 activity as judged by its structural and biochemical characterization. *Plant Physiology and Biochemistry*, 119, 200–210.
<https://doi.org/10.1016/j.plaphy.2017.08.030>

Mir, S. A., Siddiqui, M. W., Dar, B. N., Shah, M. A., Wani, M. H., Roohinejad, S., Annor, G. A., Mallikarjunan, K., Chin, C. F., & Ali, A. (2020). Promising applications of cold plasma for microbial safety, chemical decontamination



- and quality enhancement in fruits. *Journal of Applied Microbiology*, 129(3), 474–485. <https://doi.org/10.1111/jam.14541>
- Mir, Shabir Ahmad, Shah, M. A., & Mir, M. M. (2016). Understanding the Role of Plasma Technology in Food Industry. *Food and Bioprocess Technology*, 9, 734–750. <https://doi.org/10.1007/s11947-016-1699-9>
- Misra, N. N., Kaur, S., Tiwari, B. K., Kaur, A., Singh, N., & Cullen, P. J. (2015). Atmospheric pressure cold plasma (ACP) treatment of wheat flour. *Food Hydrocolloids*, 44, 115–121. <https://doi.org/10.1016/j.foodhyd.2014.08.019>
- Misra, N. N., Moiseev, T., Patil, S., Pankaj, S. K., Bourke, P., Mosnier, J. P., Keener, K. M., & Cullen, P. J. (2014). Cold Plasma in Modified Atmospheres for Post-harvest Treatment of Strawberries. *Food and Bioprocess Technology*, 7(10), 3045–3054. <https://doi.org/10.1007/s11947-014-1356-0>
- Misra, N. N., Pankaj, S. K., Segat, A., & Ishikawa, K. (2016). Cold plasma interactions with enzymes in foods and model systems. *Trends in Food Science and Technology*, 55, 39–47. <https://doi.org/10.1016/j.tifs.2016.07.001>
- Misra, N. N., Patil, S., Moiseev, T., Bourke, P., Mosnier, J. P., Keener, K. M., & Cullen, P. J. (2014). In-package atmospheric pressure cold plasma treatment of strawberries. *Journal of Food Engineering*, 125(1), 131–138. <https://doi.org/10.1016/j.jfoodeng.2013.10.023>
- Misra, N. N., Yadav, B., Roopesh, M. S., & Jo, C. (2019). Cold Plasma for Effective Fungal and Mycotoxin Control in Foods: Mechanisms, Inactivation Effects, and Applications. *Comprehensive Reviews in Food Science and Food Safety*, 18(1), 106–120. <https://doi.org/10.1111/1541-4337.12398>
- Moradbeygi, H., Jamei, R., Heidari, R., & Darvishzadeh, R. (2020). Investigating the enzymatic and non-enzymatic antioxidant defense by applying iron oxide nanoparticles in *Dracocephalum moldavica* L. plant under salinity stress. *Scientia Horticulturae*, 272(July), 109537. <https://doi.org/10.1016/j.scienta.2020.109537>
- Morales-Quintana, L., & Ramos, P. (2019). Chilean strawberry (*Fragaria chiloensis*): An integrative and comprehensive review. *Food Research International*, 119(August 2018), 769–776. <https://doi.org/10.1016/j.foodres.2018.10.059>
- Moya-León, M. A., Mattus-Araya, E., & Herrera, R. (2019). Molecular events occurring during softening of strawberry fruit. *Frontiers in Plant Science*, 10(May). <https://doi.org/10.3389/fpls.2019.00615>
- Nas, E., & Kara, F. (2022). Optimization of EDM Machinability of Hastelloy C22 Super Alloys. *Machines*, 10(12). <https://doi.org/10.3390/machines10121131>
- Nassarawa, S. S., Abdelshafy, A. M., Xu, Y., Li, L., & Luo, Z. (2021). Effect of Light-Emitting Diodes (LEDs) on the Quality of Fruits and Vegetables During Postharvest Period: a Review. *Food and Bioprocess Technology*, 14(3), 388–414. <https://doi.org/https://doi.org/10.1007/s11947-020-02534-6>



- Niazi, A. R., Ghanbari, F., & Erfani-Moghadam, J. (2021). Simultaneous effects of hot water treatment with calcium and salicylic acid on shelf life and qualitative characteristics of strawberry during refrigerated storage. *Journal of Food Processing and Preservation*, 45(1), 1–10. <https://doi.org/10.1111/jfpp.15005>
- Niemira, B. A. (2012). Cold plasma decontamination of foods *. *Annual Review of Food Science and Technology*, 3(1), 125–142. <https://doi.org/10.1146/annurev-food-022811-101132>
- Nurdjanah, S. (2018). Chlorophyll, ascorbic acid and total phenolic contents of sweet potato leaves affected by minimum postharvest handling treatment. *IOP Conference Series: Earth and Environmental Science*, 209(1). <https://doi.org/10.1088/1755-1315/209/1/012025>
- Pankaj, S. K., Wan, Z., & Keener, K. M. (2018). Effects of cold plasma on food quality: A review. *Foods*, 7(1). <https://doi.org/10.3390/foods7010004>
- Pérez-Jiménez, J., Neveu, V., Vos, F., & Scalbert, A. (2010). Identification of the 100 richest dietary sources of polyphenols: An application of the Phenol-Explorer database. *European Journal of Clinical Nutrition*, 64, S112–S120. <https://doi.org/10.1038/ejcn.2010.221>
- Pinela, J., & Ferreira, I. C. F. R. (2017). Nonthermal physical technologies to decontaminate and extend the shelf-life of fruits and vegetables: Trends aiming at quality and safety. *Critical Reviews in Food Science and Nutrition*, 57(10), 2095–2111. <https://doi.org/10.1080/10408398.2015.1046547>
- Prusky, D., Alkan, N., Miyara, I., Barad, S., Davidzon, M., Kobiler, I., Brown-horowitz, S., Lichter, A., Sherman, A., & Fluhr, R. (2010). Post-harvest Pathology. *Post-Harvest Pathology*, 2, 43–55. <https://doi.org/10.1007/978-1-4020-8930-5>
- Puligundla, P., & Mok, C. (2019). Microwave- and radio-frequency-powered cold plasma applications for food safety and preservation. In *Advances in Cold Plasma Applications for Food Safety and Preservation*. Elsevier Inc. <https://doi.org/10.1016/B978-0-12-814921-8.00011-6>
- Rana, S., Mehta, D., Bansal, V., Shihhare, U. S., & Yadav, S. K. (2020). Atmospheric cold plasma (ACP) treatment improved in-package shelf-life of strawberry fruit. *Journal of Food Science and Technology*, 57(1), 102–112. <https://doi.org/10.1007/s13197-019-04035-7>
- Ribes, S., Fuentes, A., Talens, P., & Barat, J. M. (2018). Prevention of fungal spoilage in food products using natural compounds: A review. *Critical Reviews in Food Science and Nutrition*, 58(12), 2002–2016. <https://doi.org/10.1080/10408398.2017.1295017>
- Rongai, D., Sabatini, N., Pulcini, P., Di Marco, C., Storchi, L., & Marrone, A. (2018). Effect of pomegranate peel extract on shelf life of strawberries: computational chemistry approaches to assess antifungal mechanisms involved. *Journal of Food Science and Technology*, 55(7), 2702–2711. <https://doi.org/10.1007/s13197-018-3192-0>



- Sakakita, H., Ishikawa, K., Ueda, M., Ikeda, J., Shimizu, T., Shimizu, N., Hori, M., & Ikehara, Y. (2016). Red blood cell coagulation induced by low-temperature plasma. *Archives of Biochemistry and Biophysics*, 605, 95–101. <https://doi.org/10.1016/j.abb.2016.03.023>
- Sakudo, A., Misawa, T., & Yagyu, Y. (2019). Equipment design for cold plasma disinfection of food products. In *Advances in Cold Plasma Applications for Food Safety and Preservation*. Elsevier Inc. <https://doi.org/10.1016/B978-0-12-814921-8.00010-4>
- Samtani, J. B., Rom, C. R., Friedrich, H., Fennimore, S. A., Finn, C. E., Petran, A., Wallace, R. W., Pritts, M. P., Fernandez, G., Chase, C. A., Kubota, C., & Bergefurd, B. (2019). The status and future of the strawberry industry in the United States. *HortTechnology*, 29(1), 11–24. <https://doi.org/10.21273/horttech04135-18>
- Sangwanna, S., Seelarat, W., Panklai, T., Chaosuan, N., & Subcharoen, A. (2023). Air Atmospheric Pressure Plasma Jet to Improve Fruiting Body Production and Enhance Bioactive Phytochemicals from Mutant *Cordyceps militaris* (White *Cordyceps militaris*). *Food and Bioprocess Technology*, 0123456789. <https://doi.org/10.1007/s11947-023-03028-x>
- Saremnezhad, S., Soltani, M., Faraji, A., & Hayaloglu, A. A. (2021). Chemical changes of food constituents during cold plasma processing: A review. *Food Research International*, 147(June), 110552. <https://doi.org/10.1016/j.foodres.2021.110552>
- Segura-ponce, L. A., Reyes, J. E., Troncoso-contreras, G., & Valenzuela-tapia, G. (2018). Effect of Low-pressure Cold Plasma (LPCP) on the Wettability and the Inactivation of *Escherichia coli* and *Listeria innocua* on Fresh-Cut Apple (Granny Smith) Skin. *Food and Bioprocess Technology*, 11, 1075–1086.
- Shahavi, M. H., Hosseini, M., Jahanshahi, M., Meyer, R. L., & Darzi, G. N. (2016). Clove oil nanoemulsion as an effective antibacterial agent: Taguchi optimization method. *Desalination and Water Treatment*, 57(39), 18379–18390. <https://doi.org/10.1080/19443994.2015.1092893>
- Shahbazi, Y., Shavisi, N., & Karami, N. (2021). Development of edible bioactive coating based on mucilages for increasing the shelf life of strawberries. *Journal of Food Measurement and Characterization*, 15(1), 394–405. <https://doi.org/10.1007/s11694-020-00638-3>
- Sulaimana, A. S., Yudhistira, B., Chang, C., Gavahian, M., Yu, C., Hou, C., & Hsieh, C. (2022). Optimized Alternating Current Electric Field and Light Irradiance for *Caulerpa lentillifera* Biomass Sustainability — An Innovative Approach for Potential Postharvest Applications. *Sustainability (Switzerland)*, 14, 14361. <https://doi.org/https://doi.org/10.3390/su142114361>
- Tumbarski, Y., Nikolova, R., Petkova, N., Ivanov, I., & Lante, A. (2019). Biopreservation of fresh strawberries by carboxymethyl cellulose edible coatings enriched with a bacteriocin from *Bacillus methylotrophicus* BM47. *Food Technology and Biotechnology*, 57(2), 230–237.

<https://doi.org/10.17113/ftb.57.02.19.6128>

- Tylewicz, U., Tappi, S., Genovese, J., Mozzon, M., & Rocculi, P. (2019). Metabolic response of organic strawberries and kiwifruit subjected to PEF assisted-osmotic dehydration. *Innovative Food Science and Emerging Technologies*, 56(June), 102190. <https://doi.org/10.1016/j.ifset.2019.102190>
- Tzortzakis, N., & Chrysargyris, A. (2017). Postharvest ozone application for the preservation of fruits and vegetables. *Food Reviews International*, 33(3), 270–315. <https://doi.org/10.1080/87559129.2016.1175015>
- Ucar, Y., Ceylan, Z., Durmus, M., Tomar, O., & Cetinkaya, T. (2021). Application of cold plasma technology in the food industry and its combination with other emerging technologies. *Trends in Food Science and Technology*, 114(March), 355–371. <https://doi.org/10.1016/j.tifs.2021.06.004>
- Warner, R., Wu, B. Sen, MacPherson, S., & Lefsrud, M. (2021). A Review of Strawberry Photobiology and Fruit Flavonoids in Controlled Environments. *Frontiers in Plant Science*, 12(February). <https://doi.org/10.3389/fpls.2021.611893>
- Wojdylo, A., Figiel, A., & Oszmianski, J. (2009). Effect of Drying Methods with the Application of Vacuum Microwaves on the Bioactive Compounds , Color , and Antioxidant Activity of Strawberry Fruits. *Journal of Agricultural and Food Chemistry*, 57, 1337–1343.
- Wong, L. W., Hou, C. Y., Hsieh, C. C., Chang, C. K., Wu, Y. S., & Hsieh, C. W. (2020). Preparation of antimicrobial active packaging film by capacitively coupled plasma treatment. *Lwt*, 117(August 2019), 108612. <https://doi.org/10.1016/j.lwt.2019.108612>
- Wu, H., Sun, P., Feng, H., Zhou, H., Wang, R., Liang, Y., Lu, J., Zhu, W., Zhang, J., & Fang, J. (2012). Reactive oxygen species in a non-thermal plasma microjet and water system: Generation, conversion, and contributions to bacteria inactivation -An analysis by electron spin resonance spectroscopy. *Plasma Processes and Polymers*, 9(4), 417–424. <https://doi.org/10.1002/ppap.201100065>
- Ya-wen, P., Jun-hu, C., & Da-wen, S. (2021). Inhibition of fruit softening by cold plasma treatments : affecting factors and applications. *Critical Reviews in Food Science and Nutrition*, 61(12), 1935–1946. <https://doi.org/10.1080/10408398.2020.1776210>
- Yi, F., Wang, J., Xiang, Y., Yun, Z., Pan, Y., Jiang, Y., & Zhang, Z. (2022). Physiological and quality changes in fresh-cut mango fruit as influenced by cold plasma. *Postharvest Biology and Technology*, 194(September), 112105. <https://doi.org/10.1016/j.postharvbio.2022.112105>
- Yudhistira, B., Sulaimana, A. S., Punthi, F., Chang, C., Lung, C., Santoso, S. P., Gawahian, M., & Hsieh, C. (2022). Cold Plasma-Based Fabrication and Characterization of Active Films Containing Different Types of Myristica fragrans Essential Oil Emulsion. *Polymers*, 14(4), 1618. <https://doi.org/https://doi.org/10.3390/polym14081618>



UNIVERSITAS
GADJAH MADA

Optimasi Penerapan Teknologi Plasma Dingin Vakum untuk Dekontaminasi Mikrob dan Peningkatan Kualitas

Fisikokimia Stroberi (*Fragaria Ä— ananassa Duch.*)

Andi Syahrullah, S, Dr. Jumeri, S.T.P., M.Si.; Dr. Ir. R. Wahyu Supartono

Universitas Gadjah Mada, 2023 | Diunduh dari <http://etd.repository.ugm.ac.id/>

- Zhang, M., Oh, J. K., Cisneros-Zevallos, L., & Akbulut, M. (2013). Bactericidal effects of nonthermal low-pressure oxygen plasma on *S. typhimurium* LT2 attached to fresh produce surfaces. *Journal of Food Engineering*, 119(3), 425–432. <https://doi.org/10.1016/j.jfoodeng.2013.05.045>
- Zhou, D., Wang, Z., Tu, S., Chen, S., Peng, J., & Tu, K. (2019). Effects of cold plasma, UV-C or aqueous ozone treatment on *Botrytis cinerea* and their potential application in preserving blueberry. *Journal of Applied Microbiology*, 127(1), 175–185. <https://doi.org/10.1111/jam.14280>
- Zhou, Dandan, Sun, R., Zhu, W., Shi, Y., Ni, S., Wu, C., & Li, T. (2023). Impact of dielectric barrier discharge cold plasma on the quality and phenolic metabolism in blueberries based on metabonomic analysis. *Postharvest Biology and Technology*, 197(November 2022), 112208. <https://doi.org/10.1016/j.postharvbio.2022.112208>
- Ziuzina, D., & Misra, N. N. (2016). Cold Plasma for Food Safety. In *Cold Plasma in Food and Agriculture: Fundamentals and Applications*. Elsevier Inc. <https://doi.org/10.1016/B978-0-12-801365-6.00009-3>