

DAFTAR PUSTAKA

- Abraham, R.J., Byrne, J.J., Griffiths, L., and Perez, M., 2006, ¹H chemical shifts in NMR: Part 23, the effect of dimethyl sulphoxide versus chloroform solvent on ¹H chemical shifts, *Magnetic Resonance in Chemistry*, 44, 491–509.
- Absalome, M.A., Massara, C.C., Alexandre, A.A., Gervais, K., Chantal, G.G.A., Ferdinand, D., Rhedoor, A.J., Coulibaly, I., George, T.G., Brigitte, T., Marion, M., and Jean-Paul, C., 2020, Biochemical properties, nutritional values, health benefits and sustainability of palm oil, *Biochimie*, 178, 81–95.
- Agrawal, K., Patel, T.M., Thakur, S., Patel, K., and Mittal, S., 2024, Quantum chemical modelling, molecular docking, synthesis and experimental antimicrobial activity of 1,4-diazepan linked piperidine derivative, *Futur J Pharm Sci*, 10, 1–17.
- Al-Dies, A.A.M., Ablewi, F.F., Okasha, R.M., Alsehli, M.H., Borik, R.M.A., Ihmaid, S., Amr, A.E.G.E., Ghabbour, H.A., Elhenawy, A.A., and El-Agrody, A.M., 2025, Synthesis, crystal structure, hirshfeld study, DFT analysis, molecular docking study, antimicrobial activity of β -enaminonitrile bearing 1H-pyran, *Discover Applied Sciences*, 7, 1–24.
- Alhaji, A.M., Almeida, E.S., Carneiro, C.R., da Silva, C.A.S., Monteiro, S., and Coimbra, J.S. dos R., 2024, Palm oil (*Elaeis guineensis*): A journey through sustainability, processing, and utilization, *Foods*, 13, 2814–2815.
- Anand, U., Dey, A., Chandel, A.K.S., Sanyal, R., Mishra, A., Pandey, D.K., De Falco, V., Upadhyay, A., Kandimalla, R., Chaudhary, A., Dhanjal, J.K., Dewanjee, S., Vallamkondu, J., and Pérez de la Lastra, J.M., 2023, Cancer chemotherapy and beyond: Current status, drug candidates, associated risks and progress in targeted therapeutics, *Genes Dis*, 10, 1367–1401.
- de Armas-Ricard, M., Ruiz-Reyes, E., and Ramírez-Rodríguez, O., 2019, Caffeates and caffeamides: synthetic methodologies and their antioxidant properties, *Int J Med Chem*, 2019, 1–15.
- Atlihan-Gundogdu, E., Ilem-Ozdemir, D., Ekinci, M., Ozgenc, E., Demir, E.S., Sánchez-Dengra, B., and González-Alvárez, I., 2020, Recent developments in cancer therapy and diagnosis, *J Pharm Investig*, 50, 349–361.
- Azmi, I.S., Ozir, T.A.Z.T., Rasib, I.M., Nurherdiana, S.D., and Jalil, M.J., 2022, Synergistic epoxidation of palm oleic acid using a hybrid oxygen carrier solution, *Biomass Convers Biorefin*, 1–8.
- Badisa, R.B., Darling-Reed, S.F., Joseph, P., Cooperwood, J.S., Latinwo, L.M., and Goodman, C.B., 2009, Selective Cytotoxic Activities of Two Novel Synthetic Drugs on Human Breast Carcinoma MCF-7 Cells, *Anticancer Res*, 29, 2993–2996.
- Bahadi, M., Salih, N., and Salimon, J., 2021, D-Optimal design optimization for the separation of oleic acid from Malaysian high free fatty acid crude palm

- oil fatty acids mixture using urea complex fractionation, *Applied Science and Engineering Progress*, 14, 175–186.
- Bai, Z., Yao, C., Zhu, J., Xie, Y., Ye, X.Y., Bai, R., and Xie, T., 2021, Anti-tumor drug discovery based on natural product β -elemene: Anti-tumor mechanisms and structural modification, *Molecules*, 26, 1499–1523.
- Banim, P.J., Luben, R., Khaw, K.-T., and Hart, A.R., 2018, Dietary oleic acid is inversely associated with pancreatic cancer - Data from food diaries in a cohort study, *Pancreatology*, 18, 655–660.
- Bennett, R.C. and Van Buren, M., 1969, Commercial Urea Crystallization. In: Palermo, J.A., Larson, M.A. (eds) *Crystallization from Solutions and Melts*, In, G. (ed). Springer, Boston, MA, pp. 44–45.
- Berridge, M. V., Herst, P.M., and Tan, A.S., 2005, Tetrazolium dyes as tools in cell biology: New insights into their cellular reduction, *Biotechnol Annu Rev*, 11, 127–152.
- Bhargava-Shah, A., Foygel, K., Devulapally, R., and Paulmurugan, R., 2016, Orlistat and antisense-miRNA-loaded PLGA-PEG nanoparticles for enhanced triple negative breast cancer therapy, *Nanomedicine*, 11, 235–247.
- Bhattad, A., 2023, Review on viscosity measurement: devices, methods and models, *J Therm Anal Calorim*, 148, 6527–6543.
- BPS, 2023, *Statistik Kelapa Sawit Indonesia 2022*, Direktorat Statistik Tanaman Pangan, H. dan P. (ed) Badan Pusat Statistik, Jakarta Pusat.
- Bursch, M., Mewes, J.-M., Hansen, A., and Grimme, S., 2022, Best practice DFT protocols for basic molecular computational Chemistry, *Angewandte Chemie International Edition*, 61, 1–27.
- Cabaleiro-Lago, E.M. and Rodríguez-Otero, J., 2018, On the nature of σ - σ , σ - π , and π - π stacking in extended systems, *ACS Omega*, 3, 9348–9359.
- Center for Chemical Process Safety, 2008, Appendix E: Chemical Compatibility Chart. In, *Guidelines for Hazard Evaluation Procedures*. Wiley, pp. 523–528.
- Chen, M., Ren, Y.X., Xie, Y., and Lu, W.L., 2020, Gene regulations and delivery vectors for treatment of cancer, *J Pharm Investig*, 50, 309–326.
- Chen, S. and Liang, J.F. Supporting Information The Anticancer Activity of Nano-formulated Orlistat-Dopamine Conjugates through Self-assembly, S1–S5.
- Chianese, U., Papulino, C., Ali, A., Ciardiello, F., Cappabianca, S., Altucci, L., Carafa, V., and Benedetti, R., 2023, FASN multi-omic characterization reveals metabolic heterogeneity in pancreatic and prostate adenocarcinoma, *J Transl Med*, 21, 1–15.
- Cisneros, E., Kis-Katos, K., and Nuryartono, N., 2021, Palm oil and the politics of deforestation in Indonesia, *J Environ Econ Manage*, 108, 102453.

- Corredor Montaña, J.D., Loaiza, A.E., Romanelli, G.P., de Waele, I., Tobón, Y.A., and Gómez Castaño, J.A., 2021, Insight into the conformational space of N-benzyl-N-(furan-2-ylmethyl)acetamide by nmr spectroscopy and dft calculations, *Quim Nova*, 44, 1–14.
- Cosano, D., Esquivel, D., Romero-Salguero, F.J., Jiménez-Sanchidrián, C., and Ruiz, J.R., 2020, Oleate epoxidation in a confined matrix of hydrotalcite, *ACS Omega*, 5, 619–625.
- Deepa, P.R., Vandhana, S., Muthukumar, S., Umashankar, V., Jayanthi, U., and Krishnakumar, S., 2010, Chemical inhibition of fatty acid synthase: Molecular docking analysis and biochemical validation in ocular cancer cells, *J Ocul Biol Dis Infor*, 3, 117–128.
- Delaney, J.S., 2004, ESOL: Estimating aqueous solubility directly from molecular structure, *J Chem Inf Comput Sci*, 44, 1000–1005.
- Deng, B., Kong, W., Suo, H., Shen, X., Newton, M.A., Burkett, W.C., Zhao, Z., John, C., Sun, W., Zhang, X., Fan, Y., Hao, T., Zhou, C., and Bae-Jump, V.L., 2023, Oleic Acid Exhibits Anti-Proliferative and Anti-Invasive Activities via the PTEN/AKT/mTOR Pathway in Endometrial Cancer, *Cancers (Basel)*, 15, 5407–5428.
- Doxsee, I., Jones, G., and Pollastri, M., 2016, The design and synthesis of novel aromatic analogues of cerulenin, Thesis,.
- Dunetz, J.R., Magano, J., and Weisenburger, G.A., 2016, Large-scale applications of amide coupling reagents for the synthesis of pharmaceuticals, *Org Process Res Dev*, 20, 140–177.
- Dutta, A., Chakraborty, A., Ghosh, T., and Kumar, A., 2024, 5-Fluorouracil induces apoptosis in nutritional deprived hepatocellular carcinoma through mitochondrial damage, *Sci Rep*, 14, 23387.
- El-Kalyoubi, S., El-Sebaey, S.A., El-Sayed, A.A., Abdelhamid, M.S., Agili, F., and Elfeky, S.M., 2023, Novel pyrimidine schiff bases and their selenium-containing nanoparticles as dual inhibitors of CDK1 and tubulin polymerase: design, synthesis, anti-proliferative evaluation, and molecular modelling, *J Enzyme Inhib Med Chem*, 38, 1–17.
- El-Masry, T.A., El-Nagar, M.M.F., Oriquat, G.A., Alotaibi, B.S., Saad, H.M., El Zahaby, E.I., and Ibrahim, H.A., 2024, Therapeutic efficiency of tamoxifen/orlistat nanocrystals against solid ehrlich carcinoma via targeting TXNIP/HIF1- α /MMP-9/P27 and BAX/Bcl2/P53 signaling pathways, *Biomedicine and Pharmacotherapy*, 180, 117429–117442.
- Fako, V.E., Zhang, J.T., and Liu, J.Y., 2014, Mechanism of orlistat hydrolysis by the thioesterase of human fatty acid synthase, *ACS Catal*, 4, 3444–3453.
- Faraj Aljohani, G., Hafizah Zakaria, N., Adibah Abdul Majid, F., Hudiyaniti, D., and Nur Nasyriq Anuar, M., 2024, An integrated in silico-in vitro-in vivo approach for pharmacokinetic studies of andrographolide using aqueous

- extract of *Andrographis paniculata* (Burm.f.) wall. ex Nees, Indonesian Journal of Pharmacy, 35, 599–612.
- Fatmayanti, B.R., Jumina, Purwono, B., Kurniawan, Y.S., Pranowo, H.D., and Sholikhah, E.N., 2024, Oleate Epoxides Derived from Palm Oil as New Anticancer Agents: Synthesis, Cytotoxicity Evaluation, and Molecular Docking Studies Against FASN Protein, *ChemistrySelect*, 9, 1–19.
- Fhu, C.W. and Ali, A., 2020, Fatty Acid Synthase: An Emerging Target in Cancer, *Molecules*, 25, 3935–3956.
- Fischer, J., Millan, S., and Ritter, H., 2013, N,N'-(Hexane-1,6-diyl)bis(4-methyl-N-(oxiran-2-ylmethyl) benzenesulfonamide): Synthesis via cyclodextrin mediated N-alkylation in aqueous solution and further Prilezhaev epoxidation, *Beilstein Journal of Organic Chemistry*, 9, 2834–2840.
- Gao, Y. and Chen, M., 2021, Influence of temperature-viscosity behaviors of Karamay oil sand bitumen on the geomechanics in the SAGD process, *J Pet Explor Prod Technol*, 11, 747–767.
- Giulitti, F., Petrungaro, S., Mandatori, S., Tomaipitnca, L., de Franchis, V., D'Amore, A., Filippini, A., Gaudio, E., and Ziparo, E., 2021, Anti-tumor Effect of Oleic Acid in Hepatocellular Carcinoma Cell Lines via Autophagy Reduction, *Front Cell Dev Biol*, 9, 1–6.
- Gomes, A.R., Varela, C.L., Tavares-da-Silva, E.J., and Roleira, F.M.F., 2020, Epoxide containing molecules: A good or a bad drug design approach, *Eur J Med Chem*, 201, 1–26.
- Gruber, A., Führer, F., Menz, S., Diedam, H., Göller, A.H., and Schneckener, S., 2024, Prediction of Human Pharmacokinetics From Chemical Structure: Combining Mechanistic Modeling with Machine Learning, *J Pharm Sci*, 113, 55–63.
- Günay, M.E., Türker, L., and Tapan, N.A., 2019, Significant parameters and technological advancements in biodiesel production systems, *Fuel*, 250, 27–41.
- Gupta, R., McRoberts, R., Yu, Z., Smith, C., Sloan, W., and You, S., 2022, Life cycle assessment of biodiesel production from rapeseed oil: Influence of process parameters and scale, *Bioresour Technol*, 360, 1–13.
- Han, L., Dai, W., Luo, W., Ye, L., Fang, H., Mo, S., Li, Q., Xu, Y., Wang, R., and Cai, G., 2023, Enhanced De Novo Lipid Synthesis Mediated by FASN Induces Chemoresistance in Colorectal Cancer, *Cancers (Basel)*, 15, 1–7.
- Harisa, G.I., Najashi, I., Bakheit, A.H., Attia, S.M., Alanazi, F.K., Al-Rejaie, S.S., and Mohany, M., 2023, Oleic acid and linoleic acid nanosomes boost immunity and provoke cell death via the upregulation of beta-defensin-4 at genetic and epigenetic levels, *Open Chem*, 21, 1–12.
- Huang, J., Tang, Y., Zou, X., Lu, Y., She, S., Zhang, W., Ren, H., Yang, Y., and Hu, H., 2020, Identification of the fatty acid synthase interaction network via

iTRAQ-based proteomics indicates the potential molecular mechanisms of liver cancer metastasis, *Cancer Cell Int*, 20, 2–14.

Huang, W., Liang, Y., and Ma, X., 2019, Alpha-mangostin induces endoplasmic reticulum stress and autophagy which count against fatty acid synthase inhibition mediated apoptosis in human breast cancer cells, *Cancer Cell Int*, 19, 2–14.

Huang, X., Zhao, Y., and Hou, Z., 2021, Purification of ethyl linoleate from foxtail millet (*Setaria italica*) bran oil via urea complexation and molecular distillation, *Foods*, 10, 1–12.

Jaraba Cabrera, D., Álvarez-Miguel, L., Hernando Rodríguez, A., Hamilton, A., Mosquera, M.E.G., and Whiteoak, C.J., 2024, Exploitation of Mechanistic Product Selectivity for the Two-Step Synthesis of Optically Active Bio-Derived Cyclic Carbonates Incorporating Amino Acids, *European J Org Chem*, 27, 1–9.

Jin, J., Chen, N., Pan, H., Xie, W., Xu, H., Lei, S., Guo, Z., Ding, R., He, Y., and Gao, J., 2020, Triclosan induces ros-dependent cell death and autophagy in a375 melanoma cells, *Oncol Lett*, 20, 1–10.

Khan, E., Ozaltin, K., Spagnuolo, D., Bernal-Ballen, A., Piskunov, M. V., and Di Martino, A., 2023, Biodiesel from Rapeseed and Sunflower Oil: Effect of the Transesterification Conditions and Oxidation Stability, *Energies (Basel)*, 16, 657–669.

Kumari, S., Carmona, A. V., Tiwari, A.K., and Trippier, P.C., 2020, Amide Bond Bioisosteres: Strategies, Synthesis, and Successes, *J Med Chem*, 63, 12290–12358.

Kundu, R. and De, S., 2023, Characterization and analysis of the triglyceride transesterification process, *Biomass Convers Biorefin*, 13, 4933–4948.

Leggio, A., Belsito, E.L., De Luca, G., Di Gioia, M.L., Leotta, V., Romio, E., Siciliano, C., and Liguori, A., 2016, One-pot synthesis of amides from carboxylic acids activated using thionyl chloride, *RSC Adv*, 6, 34468–34475.

Lipinski, C.A., Lombardo, F., Dominy, B.W., and Feeney, P.J., 2001, Experimental and computational approaches to estimate solubility and permeability in drug discovery and development q settings, *Adv Drug Deliv Rev*, 46, 3–26.

Liu, B., Wang, Y., Fillgrove, K.L., and Anderson, V.E., 2002, Triclosan inhibits enoyl-reductase of type I fatty acid synthase in vitro and is cytotoxic to MCF-7 and SKBr-3 breast cancer cells, *Cancer Chemother Pharmacol*, 49, 187–193.

Longley, D.B., Harkin, D.P., and Johnston, P.G., 2003, 5-Fluorouracil: Mechanisms of action and clinical strategies, *Nat Rev Cancer*, 3, 330–338.

Mamedova, V.L., Khikmatova, G.Z., Korshin, D.E., Mamedova, S.V.K., Gavrilova, E.L., and Mamedov, V.A.O., 2022, Epoxides: Methods of

- synthesis, reactivity, practical significance, *Russian Chemical Reviews*, 91, 1–76.
- Marriam, F., Irshad, A., Umer, I., Asghar, M.A., and Atif, M., 2023, Vegetable oils as bio-based precursors for epoxies, *Sustain Chem Pharm*, 31, 1–17.
- Maulidiyah, Nurdin, M., Fatma, F., Natsir, M., and Wibowo, D., 2017, Characterization of methyl ester compound of biodiesel from industrial liquid waste of crude palm oil processing, *Anal Chem Res*, 12, 1–9.
- McClellan, B., Pham, T., Harlow, B., Lee, G., Quach, D., Jolly, C., Brenner, A., and deGraffenried, L., 2022, Modulation of Breast Cancer Cell FASN Expression by Obesity-Related Systemic Factors, *Breast Cancer (Auckl)*, 16, 1–8.
- Mcneely, W. and Benfield, P., 1998, Orlistat, *Adis New Drug Profile*, 2, 241–249.
- van Meerloo, J., Kaspers, G.J.L., and Cloos, J., 2011, Cell Sensitivity Assays: The MTT Assay, pp. 237–245.
- Menendez, J.A., Cuyàs, E., Encinar, J.A., Vander Steen, T., Verdura, S., Llop-Hernández, À., López, J., Serrano-Hervás, E., Osuna, S., Martin-Castillo, B., and Lupu, R., 2024, Fatty acid synthase (FASN) signalome: A molecular guide for precision oncology, *Mol Oncol*, 18, 479–516.
- Meng, Y., Taddeo, F., Aguilera, A.F., Cai, X., Russo, V., Tolvanen, P., and Leveneur, S., 2021, The lord of the chemical rings: Catalytic synthesis of important industrial epoxide compounds, *Catalysts*, 11, 1–23.
- Milliana, A., Sari, R.A., Miranda, S. Al, and Mutiah, R., 2025, Evaluation of Anticancer Activity and Mechanism of Action of Myricetin on HeLa, T47D, and Vero Cells: Comparative Analysis with Cisplatin and Doxorubicin, *Biomedical and Pharmacology Journal*, 18, 835–847.
- Nibbering, N.M.M., 2004, The McLafferty rearrangement: A personal recollection, *J Am Soc Mass Spectrom*, 15, 956–958.
- Olivares-Tenorio, M.L., Cortes-Prieto, C.M., Londoño-Univio, N.C., Rojas-Díaz, D.A., Quintanilla-Carvajal, M.X., Tibaquirá-Pérez, L.N., Ricaurte-Puentes, L.Y., Rada-Bula, A.I., Romero, H.M., and García-Nuñez, J.A., 2024, Bioactive compounds in palm oil: A comprehensive review of recent advances in physicochemical characteristics, health-promoting properties and technologies for extraction, concentration, fractionation, encapsulation and functional food applications, *Journal of Food Composition and Analysis*, 132, .
- Pavia, D.L., Lampman, G.M., and Kriz, G.S., 2015, *Introduction to Spectroscopy*, Third Edition. Thomson Learning, Washington.
- Pemble IV, C.W., Johnson, L.C., Kridel, S.J., and Lowther, W.T., 2007, Crystal structure of the thioesterase domain of human fatty acid synthase inhibited by Orlistat, *Nat Struct Mol Biol*, 14, 704–709.

- Piegari, M., Soria, E.A., Eynard, A.R., and Valentich, M.A., 2017, Delay of Lung Adenocarcinoma (LAC-1) Development in Mice by Dietary Oleic Acid, *Nutr Cancer*, 69, 1069–1074.
- Porokhvinova, E.A., Matveeva, T. V., Khafizova, G. V., Bemova, V.D., Doubovskaya, A.G., Kishlyan, N. V., Podolnaya, L.P., and GavriloVA, V.A., 2022, Fatty acid composition of oil crops: genetics and genetic engineering, *Genet Resour Crop Evol*, 69, 2029–2045.
- Raofuddin, D.N.A., Azmi, I.S., and Jalil, M.J., 2024, Catalytic Epoxidation of Oleic Acid Derived from Waste Cooking Oil by In Situ Peracids, *J Polym Environ*, 32, 803–814.
- Riaz, F., Zhang, J., and Pan, F., 2024, Forces at play: exploring factors affecting the cancer metastasis, *Front Immunol*, 15, 1–22.
- Sabatini, M.T., Boulton, L.T., Sneddon, H.F., and Sheppard, T.D., 2019, A green chemistry perspective on catalytic amide bond formation, *Nat Catal*, 2, 10–17.
- Sadowski, M.C., Pouwer, R.H., Gunter, J.H., Lubik, A.A., Quinn, R.J., and Nelson, C.C., 2014, The fatty acid synthase inhibitor triclosan: Repurposing an anti-microbial agent for targeting prostate cancer, *Oncotarget*, 5, 9362–9381.
- Shi, J., Wang, J., Gao, Y., Tian, S., Zhou, Z., and Ren, Z., 2023, Extraction of nervonic acid from *Acer truncatum* oil by urea inclusion, *Chemical Papers*, 77, 5701–5711.
- Siddiqui, A.J., Jahan, S., Singh, R., Saxena, J., Ashraf, S.A., Khan, A., Choudhary, R.K., Balakrishnan, S., Badraoui, R., Bardakci, F., and Adnan, M., 2022, Plants in anticancer drug discovery: From molecular mechanism to chemoprevention, *Biomed Res Int*, 2022, 1–18.
- Sigmond, J., Backus, H.H.J., Wouters, D., Temmink, O.H., Jansen, G., and Peters, G.J., 2003, Induction of resistance to the multitargeted antifolate pemetrexed (ALIMTA) in WiDr human colon cancer cells is associated with thymidylate synthase overexpression, *Biochem Pharmacol*, 66, 431–438.
- Sippel, K.H., Vyas, N.K., Zhang, W., Sankaran, B., and Quioco, F.A., 2014, Crystal structure of the human fatty acid synthase enoyl-acyl carrier protein-reductase domain complexed with triclosan reveals allosteric protein-protein interface inhibition, *Journal of Biological Chemistry*, 289, 33287–33295.
- Stavila, E., Yuliati, F., Adharies, A., Laksmono, J.A., and Iqbal, M., 2023, Recent advances in synthesis of polymers based on palm oil and its fatty acids, *RSC Adv*, 13, 14747–14775.
- Stockert, J.C., Blázquez-Castro, A., Cañete, M., Horobin, R.W., and Villanueva, Á., 2012, MTT assay for cell viability: Intracellular localization of the formazan product is in lipid droplets, *Acta Histochem*, 114, 785–796.

- Sung, H., Ferlay, J., Siegel, R.L., Laversanne, M., Soerjomataram, I., Jemal, A., and Bray, F., 2021, Global Cancer Statistics 2020: GLOBOCAN Estimates of Incidence and Mortality Worldwide for 36 Cancers in 185 Countries, *CA Cancer J Clin*, 71, 209–249.
- Suriaini, N., Arpi, N., Syamsuddin, Y., and Supardan, M.D., 2023, Characteristics of palm oil-based oleogel and its potency as a shortening replacer, *S Afr J Chem Eng*, 43, 197–203.
- Szatyłowicz, H., Jezuita, A., and Krygowski, T.M., 2019, On the relations between aromaticity and substituent effect, *Struct Chem*, 30, 1529–1548.
- Tang, X., Hu, M., Liu, X., Li, Y., Zhang, J., and Cheng, J., 2023, Preparation of Chiral Epoxy Resins and the Optically Active Cured Products, *Advances in Polymer Technology*, 2023, 1–10.
- Venczel, M., Bognár, G., and Veress, Á., 2021, Temperature-dependent viscosity model for silicone oil and its application in viscous dampers, *Processes*, 9, 1–21.
- Wattanapitayakul, S.K., Chularojmontri, L., Herunsalee, A., Charuchongkolwongse, S., Niumsukul, S., and Bauer, J.A., 2005, Screening of antioxidants from medicinal plants for cardioprotective effect against doxorubicin toxicity, *Basic Clin Pharmacol Toxicol*, 96, 80–87.
- WHO, 2025, Graphic Estimated Number of Prevalent Cases, Both Sexes, in 2022, Continents, All Cancers, <http://gco.iarc.int/today>, 1–1.
- Xu, S., Chen, T., Dong, L., Li, T., Xue, H., Gao, B., Ding, X., Wang, H., and Li, H., 2021, Fatty acid synthase promotes breast cancer metastasis by mediating changes in fatty acid metabolism, *Oncol Lett*, 21, 1–9.
- Yamagata, K., Uzu, E., Yoshigai, Y., Kato, C., and Tagami, M., 2021, Oleic acid and oleoylethanolamide decrease interferon- γ -induced expression of PD-L1 and induce apoptosis in human lung carcinoma cells, *Eur J Pharmacol*, 903, 1–9.
- Yusoff, M.N.A.M., Zulkifli, N.W.M., Sukiman, N.L., Kalam, M.A., Masjuki, H.H., Syahir, A.Z., Awang, M.S.N., Mujtaba, M.A., Milano, J., and Shamsuddin, A.H., 2022, Microwave irradiation-assisted transesterification of ternary oil mixture of waste cooking oil – *Jatropha curcas* – Palm oil: Optimization and characterization, *Alexandria Engineering Journal*, 61, 9569–9582.
- Zeng, W., Du, Y., Xue, Y., and Frisch, H.L., 2007, Solubility parameter,. In, *Physical Properties of Polymers Handbook*. Springer, Albany, pp. 289–303.
- Zheng, Z., Dai, Z., and Shen, Q., 2018, Enrichment of polyunsaturated fatty acids from seal oil through urea adduction and the fatty acids change rules during the process, *J Food Process Preserv*, 42, 1–8.



Zhou, X., Chang, T.L., Chen, S., Liu, T., Wang, H., and Liang, J.F., 2019, Polydopamine-decorated orlistat-loaded hollow capsules with an enhanced cytotoxicity against cancer cell lines, *Mol Pharm*, 16, 2511–2521.