

## DAFTAR PUSTAKA

- Adam, R, Al-Masoudi, W., and Ibraheim, H., 2022, Conventional and Microwave Irradiation Methods; Antibacterial Evaluation of Thiophene Chalcones Derivatives, *J. Med. Sci.*, 4(1).
- Ahmad, M., Sastry, V., Bano, N., and Anwar, S., 2011, Synthesis of Novel Chalcone Derivatives by Conventional and Microwave Irradiation Methods and Their Pharmacological Activities., *Arab J. Chem.*, 9(1), 1-5.
- Anisa, D., Anwar, C., and Afriyani, H., 2020, Sintesis Senyawa Analog Kurkumin Berbahan Dasar Veratraldehida Dengan Metode *Ultrasound*, *Anal. Environ. Chem. Anal.*, 5(1), 74-81.
- Belsare, D., Pal, S., Kazi, A., Kankate, R., and Vanjari S., 2011, Evaluation of Antioxidant Activity of Chalcones and Flavonoids, *Int. J. ChemTech Res.*, 2(2), 1080-1089.
- Chen, Y., Su, C., Ke, M., Jin, X., Xu, L., Zhang, Z., Wu, A., Sun, Y., Yang, Z., Tien, P., and Ahola, T., 2011, Biochemical and Structural Insights Into the Mechanisms of SARS Coronavirus RNA Ribose 2'-O-methylation by Nsp16/Nsp10 Protein Complex, *PLoS Pathog.*, 7(10), e1002294.
- Cheng, P., Yang, L., Huang, X., Wang, X., and Gong, M., 2020, Chalcone Hybrids and Their Antiviral Activity, *Archiv der Pharmazie*, 353(4), 1900350.
- Cui, J., Li, F. and Shi, Z., 2019, Origin and Evolution of Pathogenic Coronaviruses, *Nat. Rev. Microbiol.*, 17(3), 181-192.
- Decroly, E., Debarnot, C., Ferron, F., Bouvet, M., Coutard, B., Imbert, I., Gluais, L., Papageorgiou, N., Sharff, A., Bricogne, G., and Ortiz-Lombardia, M., 2011, Crystal Structure and Functional Analysis of the SARS-Coronavirus RNA Cap 2'-O-methyltransferase Nsp10/Nsp16 Complex, *PLoS pathog.*, 7(5), e1002059
- Desai, N., Bhatt, K., Jadeja, D., Mehta, H., Khedkar, V., and Sarkar, D., 2021, Conventional and Microwave-Assisted Organic Synthesis of Novel Antimicrobial Agents Bearing Furan and Pyridine Hybrids, *Drug Dev. Res.*, 83(2), 416-431.
- Diaz-Ortiz, A., Prieto, P., and De La Hoz, A., 2019, A Critical Overview on the Effect of Microwave Irradiation in Organic Synthesis, *Chem. Rec.*, 19(1), 85-97.
- Duran, N., Polar, M., Aktas, D., Alagoz, M., Ay, E., Cimen, F., Tek, E., Anil, B., Burmaoglu, S., and Algul, O., 2021, New Chalcone Derivatives As Effective Against SARS-CoV-2 Agent, *Int. J. Clin. Pract.*, 72(12), e14846.

- Elfi, S., Matsjeh, S., Mustofa, Redjeki, T., and Wahyuningsih, T., 2014, Synthesis and Antioxidant Activities of Some Hydroxy Dimethoxy Chalcone Derivatives, *Indones. J. Pharm.*, 25(1), 17-24.
- Feriyanto, Y., Sipahutar, P., Mahfud, M., and Prihatini, P., 2013, Pengambilan Minyak Atsiri dari Daun dan Batang Serai Wangi (*Cymbopogon winterianus*) Menggunakan Metode Distilasi Uap dan Air dengan Pemanasan Microwave. *Jurnal Teknik ITS*, 2(1), F93-F97.
- Gómez-jeria, J., Robles-navarro, A., Kpotin, G., and Gatica-díaz, N., 2020, Some eRemarks About The Relationships Between The Common Skeleton Concept Within The Klopman-Peradejordi-Gómez QSAR Method and The Weak Molecule-site Interactions, *Chem. Res. J.*, 5, 32-52.
- Gupta, P. and Mahajan, A., 2019, Sustainable Approaches for Steroid Synthesis, *Environ. Chem. Lett.*, 17(2), 879-895.
- Hall Jr., D. and Ji, H., 2020, A Search for Medication to Treat COVID-19 Via In Silico Molecular Docking Models of the SARS-CoV-2 Spike Glycoprotein and 3CL Protease, *Travel Med. Infect. Dis.*, 35, 101646.
- Hasöksüz, M., Kilic, S. and Saraç, F., 2020, Coronaviruses and SARS-CoV-2, *Turk. J. Med. Sci.*, 50(9), 549-556.
- Huang, C., Wang, Y., Li X., Ren, L., Zhao, J., Hu, Y., Zhang, L., Fan, G., Xu, J., Gu, X., Cheng, Z., Yu, T., Xia, J., Wei, Y., Wu, W., Xie, X., Yin, W., Li, H., Liu, M., Xiao, Y., Gao, H., Guo, L., Xie, J., Wang, G., Jiang, R., Gao, Z., Jin, Q., Wang, J., and Cao, B., 2020, Clinical Features of Patients Infected with 2019 Novel Coronavirus in Wuhan, China, *The Lancet.*, 395, 497-506.
- Jayapal, M. and Sreedhar, N., 2010, Anhydrous K<sub>2</sub>CO<sub>3</sub> as Catalyst For the Synthesis of Chalcones Under Microwave Irradiation, *J. Pharm. Sci. and Res.*, 2(10), 644-647.
- Jia, C., Li, J., Hao, G., and Yang, G., 2020, A Drug-Likeness Toolbox Facilitates ADMET Study in Drug Discovery, *Drug Discov. Today*, 25, 248– 258.
- Joselevich, E., 2004, Electronic Structure Structure and Chemical Reactivity of Carbon Nanotubes: A Chemist's View, *ChemPhysChem*, 5, 619-624.
- Kalita, J., Chetia, D., and Rudrapal, M., 2019, Molecular Docking; Drug-Likeness Studies and ADMET Prediction of Quinoline Imines For Antimalarial Activity, *J. Med. Chem. Drug Des.*, 2(1), 1-7.
- Katade, S., Phalgune, U., Biswas, S., Wakharkar, R., and Deshpande, N., 2008, Microwave Studies on Synthesis of Biologically Active Chalcone Derivatives, *Indian J. Chem.*, 47B, 927-931.

- Kaysser, L., 2019, Built to Bind: Biosynthetic Strategies For the Formation of Small Molecule Protease Inhibitors, *Nat. Prod. Rep.*, 12(36), 1654-1686.
- Kitchen, D., Decornez, H., Furr, J., and Bajorath, J., 2004, Docking and Scoring in Virtual Screening for Drug Discovery: Method and Application, *Nat. Rev.*, 4, 935-949.
- Kumar, A., Roy, S., Tripathi, S., and Sharma, A., 2016, Molecular Docking Based Virtual Screening of Natural Compounds as Potential BACE1 Inhibitors: 3D QSAR Pharmacopore Mapping and Molecular Dynamics Analysis, *J. Biomol. Struct. Dyn.*, 34, 239-249.
- Liang, J., Pitsillou, E., Burbury, L., Hung, A., and Karagiannis, T., 2021, In Silico Investigation of Potential Small Molecule Inhibitors of the SARS-CoV-2 NSP 10-NSP 16 Methyltransferase Complex, *Chem. Phys. Lett.*, 774, 138618.
- Malik, Y.S., Sircar, S., Bhat, S., Sharun, K., Dhama, K., Dadar, M., Tiwari, R., and Chaicumpa, W., 2020, Emerging Novel Coronavirus (2019-nCoV)—Current Scenario; Evolutionary Perspective Based on Genome Analysis and Recent Developments, *Vet. Q.*, 40(1), 68-76.
- Mandge, S., Singh, H. P., Gupta, D., and Moorthy, H., 2007, Synthesis and Characterization of Some Chalcone Derivatives, *Trend Applied Sci. Res.*, 2, 52-56.
- Marinov, R., Markova, N., Krumova, S., Yotovska, K., Zaharieva, M., and Genova-Kalou, P., 2020, Antiviral Properties of Chalcones and Their Synthetic Derivatives: A Mini Review, *Pharmacia*, 67, 325.
- Mena-Ulecia, K., Tiznado, W., and Caballero, J., 2015, Study of the Differential Activity of Thrombin Inhibitors Using Docking; QSAR; Molecular Dynamics; and MM-GBSA, *PLoS One.*, 10(11), e0142774.
- Meng, L., Feng, K., and Ren, Y., 2018, Molecular Modelling Studies of Tricyclic Triazinone Analogues as Potential PKC- $\theta$  Inhibitors Through Combined QSAR; Molecular Docking; and Molecular Dynamics Simulation Techniques, *J. Taiwan Inst. Chem. Eng.*, 91, 155-175.
- Nalwar, Y., Sayyed, M., Mokle, S., Zanwar, P., and Vibhute Y., 2009, Synthesis and Insect Antifeedant Activity of Some New Chalcone Against *Phenacoccus solenopsis*, *World J. Chem.*, 4(2), 123-126.
- Naqvi, A., Fatima, K., Mohammad, T., Fatima, U., Singh, I., Singh, A., Atif, S., Hariprasad, G., Hasan, G., and Hassan, M., 2020, Insights Into SARS-CoV-2 Genome; Structure; Evolution; Pathogenesis and Therapies: Structural Genomics Approach, *Biochim. Biophys. Acta-Mol. Basis Dis.*, 1866(10), 165878.

- Patil, C., Mahajan, S., and Katti, S., 2009, Chalcone: A Versatile Molecule, *J. Pharm. Sci. Res.*, 1(3), 11-22.
- Prasad, Y., Lakshmana, A., and Rambabu, R., 2008, Synthesis and Antimicrobial Activity of Some Chalcone Derivatives, *E-J. Chem.*, 5(3), 461-466.
- Rai, H., Barik, A., Singh, Y., Suresh, A., Singh, L., Singh, G., Nayak, U., Dubey, V., and Modi, G., 2021, Molecular Docking; Binding Mode Analysis; Molecular Dynamics; and Prediction of ADMET/toxicity Properties of Selective Potential Antiviral Agents Against SARS-CoV-2 Main Protease: An Effort Toward Drug Repurposing to Combat COVID19, *Mol. Divers*, 25(3), 1905–1927.
- Ren, Z., Yan, L., Zhang, N., Guo, Y., Yang, C., Lou, Z., and Rao, Z., 2013, The Newly Emerged SARS-Like Coronavirus HCoV-EMC Also Has An “Achilles’ heel”: Current Effective Inhibitor Targeting a 3C-Like Protease, *Protein Cell.*, 4(4), 248-250.
- Salentin, S., Haupt, V., Daminelli, S., and Schroeder, M., 2014, Polypharmacology Rescored: Protein-Ligand Interaction Profiles For Remote Binding Site Similarity Assessment, *Prog. Biophys. Mol. Biol.*, 116, 174-186.
- Sharma, N., Sharma, U., and Van der Eycken, E., 2018, Microwave-Assisted Organic Synthesis: Overview of Recent Applications, *Green Techniques for Organic Synthesis and Medicinal Chemistry*, 2, 441-468.
- Suirta, I., 2016, Sintesis Senyawa Kalkon Serta Uji Aktivitas Sebagai Antioksidan, *Jurnal Kimia*, 10(1), 75-80.
- Susanti, V. and Setyowati W., 2019, Synthesis and Characterization of Some Bromochalcones Derivatives, *IOP Conf. Ser.: Mater. Sci. Eng.*, 578(1), 012002.
- Susanti, E., Matsjeh, S., Mustofa, Redjeki, T., and Wahyuningsih, T., 2014, Synthesis and Antioxidant Activities of Some Hydroxy Dimethoxy Chalcone Derivatives, *Indones. J. Pharm.*, 25(1), 17-24.
- Suwito, H., Jumina, Mustofa, Alfinda, N., and Tri P., 2014, Chalcones: Synthesis; Structure Diversity; and Pharmacological Aspects, *J. Chem. Pharm. Res.*, 6(5), 1078-1088.
- Tierney, J. and Lidström, P., 2009, *Microwave Assisted Organic Synthesis*, Blackwell Publishing Ltd., Oxford.
- Tiwari, B., Pratapwar, A., Tapas, A., Butle, S., and Vatkar, B., 2010, Synthesis and Antimicrobial Activity of Some Chalcone Derivatives, *Int. J. Chemtech. Res.*, 2(1), 499-503.

- Verma, S., Twilley, D., Esmear, T., Oosthuizen, C., Reid, A., Nel, M., and Lall, N., 2020, Anti-SARS-CoV Natural Products With the Potential to Inhibit SARS-CoV-2 (COVID-19), *Front. Pharmacol.*, 1514.
- Vijayakumar, S., Manogar, P., Prabhu, S., and Sanjeevkumar, R., 2018, Novel Ligand-Based Docking; Molecular Dynamic Simulations; and Absorption; Distribution; Metabolism; and Excretion Approach to Analyzing Potential Acetylcholinesterase Inhibitors for Alzheimer's Disease, *J. Pharm. Anal.*, 8, 413–420.
- Wang, T., Wu, M., and Chen, Z., 2014, Fragment-Based Drug Discovery and Molecular Docking in Drug Design, *Curr. Pharm. Biotechnol.*, 15, 1-15.
- Wu Y., Chen C., and Chan Y., 2020, The Outbreak of COVID-19, *J. Chin. Med Assoc.*, 83, 217-220.
- Yu, R., Chen, L., Lan, R., Shen, R., and Li, P., 2020, Computational Screening of Antagonists Against The SARS-CoV-2 (COVID-19) Coronavirus by Molecular Docking, *Int. J. Antimicrob. Agents.*, 2(56), 106012.
- Zhang, L., Lin, D., Sun, X., Curth, U., Drosten, C., Sauerhing, L., Becker, S., Rox, K., and Hilgenfeld, R., 2020, Crystal Structure of SARS-CoV-2 Main Protease Provides a Basis for Design of Improved A-Ketoamide Inhibitors, *Science*, 368, 409-412.