

DAFTAR PUSTAKA

- Arwansyah, A., Ambarsari, L., & Sumaryada, T. I. 2014. Simulasi docking senyawa kurkumin dan analognya sebagai inhibitor reseptor androgen pada kanker prostat. *Current Biochemistry*, 1(1):11-19.
- Aristyani, S., Nur, M. I., Widyarti, S., & Sumitro, S. B. 2018. In silico study of active compounds ADMET Profiling in *Curcuma xanthorrhiza* Roxb and *Tamarindus indica* as Tuberculosis Treatment. *Jurnal Jamu Indonesia*, 3(3):101-108.
- Beigel, J. H., Tomashek, K. M., Dodd, L. E., Mehta, A. K., Zingman, B. S., Kalil, A. C., ... & Lane, H. C. 2020. Remdesivir for the treatment of Covid-19—preliminary report. *The New England journal of medicine*.
- Bialonska, D., Kasimsetty, S. G., Schrader, K. K., & Ferreira, D. 2009. The effect of pomegranate (*Punica granatum* L.) byproducts and ellagitannins on the growth of human gut bacteria. *Journal of agricultural and food chemistry*, 57(18):8344-8349.
- Chu, C. K., Gadthula, S., Chen, X., Choo, H., Olgen, S., Barnard, D. L., & Sidwell, R. W. 2006. Antivirus activity of nucleoside analogues against SARS-coronavirus (SARS-CoV). *Antivirus Chemistry and Chemotherapy*, 17(5):285-289.
- Cortegiani, A., Ingoglia, G., Ippolito, M., Giarratano, A., & Einav, S. 2020. A systematic review on the efficacy and safety of chloroquine for the treatment of COVID-19. *Journal of critical care*, 57:279-283.
- Cosconati, S., Forli, S., Perryman, A. L., Harris, R., Goodsell, D. S., & Olson, A. J. 2010. Virtual screening with AutoDock: theory and practice. *Expert opinion on drug discovery*, 5(6):597-607.
- Daina, A., Michielin, O., & Zoete, V. 2017. SwissADME: a free web tool to evaluate pharmacokinetics, drug-likeness and medicinal chemistry friendliness of small molecules. *Scientific reports*, 7(1):1-13.
- Dallakyan, S., & Olson, A. J. 2015. Small-molecule library screening by docking with PyRx. In *Chemical biology* (pp. 243-250). Humana Press, New York, NY.
- De Wilde, A. H., Snijder, E. J., Kikkert, M., & van Hemert, M. J. 2017. Host factors in coronavirus replication. *Roles of host gene and non-coding RNA expression in virus infection*, 1-42.
- DeLano, W. L., & Bromberg, S. 2004. PyMOL user's guide. *DeLano Scientific LLC*, 629.
- Dong, J., Wang, N. N., Yao, Z. J., Zhang, L., Cheng, Y., Ouyang, D., ... & Cao, D. S. 2018. ADMETlab 2.0: a platform for systematic ADMET evaluation based on a comprehensively collected ADMET database. *Journal of cheminformatics*, 10(1):1-11.
- Dong, Jie., Ning-Ning, Wang., Zhi-Jiang, Yao, Lin, Zhang., Yan, Cheng., Defang, Ouyang., Ai-Ping, Lu., Dong-Sheng, Cao. 2018. ADMETlab 2.0: a platform for systematic ADMET evaluation based on a comprehensively collected ADMET database. *Journal of Cheminformatics*, 10:29

- El-Hachem, N., Haibe-Kains, B., Khalil, A., Kobeissy, F. H., & Nemer, G. 2017. AutoDock and AutoDockTools for protein-ligand docking: Beta-site amyloid precursor protein cleaving enzyme 1 (BACE1) as a case study. In *Neuroproteomics* (pp. 391-403). Humana Press, New York, NY.
- Foloppe, N., & Chen, I. J. 2009. Conformational sampling and energetics of drug-like molecules. *Current medicinal chemistry*, 16(26):3381-3413.
- Forli, S., Huey, R., Pique, M. E., Sanner, M. F., Goodsell, D. S., & Olson, A. J. 2016. Computational protein–ligand docking and virtual drug screening with the AutoDock suite. *Nature protocols*, 11(5), 905-919.
- Goodsell, D. S., Zardecki, C., Di Costanzo, L., Duarte, J. M., Hudson, B. P., Persikova, I., ... & Burley, S. K. 2020. RCSB Protein Data Bank: Enabling biomedical research and drug discovery. *Protein Science*, 29(1):52-65.
- Haidari, M., Ali, M., Casscells III, S. W., & Madjid, M. 2009. Pomegranate (*Punica granatum*) purified polyphenol extract inhibits influenza virus and has a synergistic effect with oseltamivir. *Phytomedicine*, 16(12):1127-1136.
- Hanum, G. A. 2020. *CORONAVIRUS DISEASE (COVID-19)*. Website, [http://tanjungpriok.karantina.pertanian.go.id/?CORONAVIRUS%20DISEASE%20\(COVID-19\)&tab=tulisan&menu=7](http://tanjungpriok.karantina.pertanian.go.id/?CORONAVIRUS%20DISEASE%20(COVID-19)&tab=tulisan&menu=7), diakses pada tanggal 12 Maret 2021.
- Harcourt, B. H., Jukneliene, D., Kanjanahaluethai, A., Bechill, J., Severson, K. M., Smith, C. M., ... & Baker, S. C. 2004. Identification of severe acute respiratory syndrome coronavirus replicase products and characterization of papain-like protease activity. *Journal of virology*, 78(24):13600-13612.
- Hardjono, S. 2017. Prediksi Sifat Farmakokinetik, Toksisitas dan Aktivitas Sitotoksik Turunan N-Benzoil-N'-(4-fluorofenil) tiourea sebagai Calon Obat Antikanker melalui Pemodelan Molekul. *Jurnal Ilmu Kefarmasian Indonesia*, 14(2):246-255.
- Howell, A. B., & D'Souza, D. H. 2013. The pomegranate: effects on bacteria and viruses that influence human health. *Evidence-Based Complementary and Alternative Medicine*, 2013.
- Huang, C., Wang, Y., Li, X., Ren, L., Zhao, J., Hu, Y., ... & Cao, B. 2020. Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *The lancet*, 395(10223):497-506.
- Idrees, S., & Ashfaq, U. A. 2014. Discovery and design of cyclic peptides as dengue virus inhibitors through structure-based molecular docking. *Asian Pac J Trop Med*, 7(7):513-6.
- Janković, S. 2020. Current status and future perspective of coronavirus disease 2019: a review. *Scr Med* 51:101–109.
- Jiang, Y., Yin, W., & Xu, H. E. 2021. RNA-dependent RNA polymerase: Structure, mechanism, and drug discovery for COVID-19. *Biochemical and Biophysical Research Communications*, 538:47-53.
- Lu, S. J., & Chong, F. C. 2012. Combining molecular docking and molecular dynamics to predict the binding modes of flavonoid derivatives with the neuraminidase of the 2009 H1N1 influenza A virus. *International journal of molecular sciences*, 13(4):4496-4507.

- Lukito, J. I. 2020. Tinjauan Antivirus untuk Terapi COVID-19. *Cermin Dunia Kedokteran*, 47(7):340-345.
- Markosian, C., Di Costanzo, L., Sekharan, M., Shao, C., Burley, S. K., & Zardecki, C. 2018. Analysis of impact metrics for the Protein Data Bank. *Scientific data*, 5(1):1-10.
- Moradi, M. T., Karimi, A., Rafeian-Kopaei, M., Rabiei-Faradonbeh, M., & Momtaz, H. 2020. Pomegranate peel extract inhibits internalization and replication of the influenza virus: An *in vitro* study. *Avicenna journal of phytomedicine*, 10(2):143.
- Morris, G. M., Huey, R., Lindstrom, W., Sanner, M. F., Belew, R. K., Goodsell, D. S., & Olson, A. J. 2009. AutoDock4 and AutoDockTools4: Automated docking with selective receptor flexibility. *Journal of computational chemistry*, 30(16):2785-2791.
- Murugan, N. A., Pandian, C. J., & Jeyakanthan, J. 2020. Computational investigation on *Andrographis paniculata* phytochemicals to evaluate their potency against SARS-CoV-2 in comparison to known antivirus compounds in drug trials. *Journal of Biomolecular Structure and Dynamics*, 1-12.
- Orgil, O., Schwartz, E., Baruch, L., Matityahu, I., Mahajna, J., & Amir, R. 2014. The antioxidative and anti-proliferative potential of non-edible organs of the pomegranate fruit and tree. *LWT-Food Science and Technology*, 58(2):571-577.
- Pedretti, A., Villa, L., & Vistoli, G. 2004. VEGA—an open platform to develop chemo-bio-informatics applications, using plug-in architecture and script programming. *Journal of computer-aided molecular design*, 18(3):167-173.
- Perrier, A., Bonnin, A., Desmarests, L., Danneels, A., Goffard, A., Rouillé, Y., ... & Belouzard, S. 2019. The C-terminal domain of the MERS coronavirus M protein contains a trans-Golgi network localization signal. *Journal of Biological Chemistry*, 294(39):14406-14421.
- Pillaiyar, T., Manickam, M., Namasivayam, V., Hayashi, Y., & Jung, S. H. 2016. An overview of severe acute respiratory syndrome–coronavirus (SARS-CoV) 3CL protease inhibitors: peptidomimetics and small molecule chemotherapy. *Journal of medicinal chemistry*, 59(14):6595-6628.
- Reddy, B. U., Mullick, R., Kumar, A., Sudha, G., Srinivasan, N., & Das, S. 2014. Small molecule inhibitors of HCV replication from pomegranate. *Scientific reports*, 4(1):1-10.
- Rothan, H. A., & Byraredy, S. N. 2020. The epidemiology and pathogenesis of coronavirus disease (COVID-19) outbreak. *Journal of autoimmunity*, 109:102433.
- Sajuni, S. 2020. Vaksinasi Measles, Mumps, dan Rubella (MMR) Sebagai Prophylaxis Terhadap COVID-19. *Keluwih: Jurnal Kesehatan dan Kedokteran*, 1(2):25-28.
- Salentin, S., Schreiber, S., Haupt, V. J., Adasme, M. F., & Schroeder, M. 2015. PLIP: fully automated protein–ligand interaction profiler. *Nucleic acids research*, 43(W1):W443-W447.

- Saputri, K. E., Fakhmi, N., Kusumaningtyas, E., Priyatama, D., & Santoso, B. 2016. Docking molekular potensi anti diabetes melitus tipe 2 turunan zerumbon sebagai inhibitor aldosa reduktase dengan autodock-vina. *Chimica et Natura Acta*, 4(1):16-20.
- Sari, I. W., Junaidin, J., & Pratiwi, D. 2020. STUDI MOLECULAR DOCKING SENYAWA FLAVONOID HERBA KUMIS KUCING (*Orthosiphon stamineus* B.) PADA RESEPTOR α -GLUKOSIDASE SEBAGAI ANTIDIABETES TIPE 2. *Jurnal Farmagazine*, 7(2):54-60.
- Sawicki, S. G., & Sawicki, D. L. 2005. Coronavirus transcription: a perspective. *Coronavirus replication and reverse genetics*, 31-55.
- Schneider, G., & Baringhaus, K. H. 2008. *Molecular design: concepts and applications*. John Wiley & Sons.
- Septiana, E. 2020. Prospek Senyawa Bahan Alam Sebagai Antivirus Dalam Menghambat SARS-CoV-2. *Biotrends*, 11(1):30-38.
- Simu, S. Y., Siddiqi, M. H., Ahn, S., Castro-Aceituno, V., Kumar, N. S., Perez, Z. E. J., & Yang, D. C. 2017. Ginsenoside F1 attenuates lipid accumulation and triglycerides content in 3T3-L1 adipocytes with the modulation of reactive oxygen species (ROS) production through PPAR- γ /JAK2 signaling responses. *Medicinal Chemistry Research*, 26(5):1042-1051.
- Su, X., Sangster, M. Y., & D'Souza, D. H. 2010. *In vitro* effects of pomegranate juice and pomegranate polyphenols on foodborne viral surrogates. *Foodborne Pathogens and Disease*, 7(12):1473-1479.
- Subissi, L., Imbert, I., Ferron, F., Collet, A., Coutard, B., Decroly, E., & Canard, B. 2014. SARS-CoV ORF1b-encoded nonstructural proteins 12–16: replicative enzymes as antiviral targets. *Antivirus research*, 101:122-130.
- Subissi, L., Posthuma, C. C., Collet, A., Zevenhoven-Dobbe, J. C., Gorbalenya, A. E., Decroly, E., ... & Imbert, I. 2014. One severe acute respiratory syndrome coronavirus protein complex integrates processive RNA polymerase and exonuclease activities. *Proceedings of the National Academy of Sciences*, 111(37):E3900-E3909.
- Surucic, R., Tubić, B., Stojiljković, M. P., Djuric, D. M., Travar, M., Grabež, M., ... & Škrbić, R. 2020. Computational study of pomegranate peel extract polyphenols as potential inhibitors of SARS-CoV-2 virus internalization. *Molecular and cellular biochemistry*, 1-15.
- Susilo, A., Rumende, C. M., Pitoyo, C. W., Santoso, W. D., Yulianti, M., Herikurniawan, H., ... & Yuniastuti, E. 2020. Coronavirus disease 2019: Tinjauan literatur terkini. *Jurnal Penyakit Dalam Indonesia*, 7(1):45-67.
- Tiara Ajeng, L., Rina, H., & Asmiyenti, D. D. 2020. Analisis Docking Molekuler Senyawa Derivat Phthalimide sebagai Inhibitor Non-Nukleosida HIV-1 Reverse Transcriptase. *ARTIKEL JURNAL*.
- Tortorici, M. A., & Vesler, D. 2019. Structural insights into coronavirus entry. In *Advances in virus research* (Vol. 105, pp. 93-116). Academic Press.
- Trott, O., & Olson, A. J. 2010. AutoDock Vina: improving the speed and accuracy of docking with a new scoring function, efficient optimization, and multithreading. *Journal of computational chemistry*, 31(2):455-461.

- ul Qamar, M. T., Alqahtani, S. M., Alamri, M. A., & Chen, L. L. 2020. Structural basis of SARS-CoV-2 3CLpro and anti-COVID-19 drug discovery from medicinal plants. *Journal of pharmaceutical analysis*, 10(4):313-319.
- United States Department of Agriculture. 2021. Natural Resources Conservation Service, Website, <https://plants.usda.gov/core/profile?symbol=PUGR2>, tanggal 13 Maret 2021 (10.18).
- United States Department of Agriculture. 2021. Phytochemical and Ethnobotanical Databases, Website, <https://phytochem.nal.usda.gov/phytochem/search>, tanggal 18 Maret 2021 (17.21).
- Wan, Y., Graham, R., Baric, R., & Li, F. 2020. An analysis based on decade-long structural studies of SARS 3, JVI Accepted Manuscript Posted Online 29 January 2020. *J. Virol.*
- Wang, Y., Zhang, D., Du, G., Du, R., Zhao, J., Jin, Y., ... & Wang, C. 2020. Remdesivir in adults with severe COVID-19: a randomised, double-blind, placebo-controlled, multicentre trial. *The Lancet*, 395(10236):1569-1578.
- World Health Organization. 2021. COVID-19 vaccines, Website, <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/covid-19-vaccines>, tanggal 12 Maret 2021 (21.00).
- World Health Organization. 2021. *WHO Coronavirus Disease (COVID-19) Dashboard*, Website, <https://covid19.who.int/>, tanggal 12 April 2021 (04.23).
- Wu, C., Liu, Y., Yang, Y., Zhang, P., Zhong, W., Wang, Y., ... & Li, H. 2020. Analysis of therapeutic targets for SARS-CoV-2 and discovery of potential drugs by computational methods. *Acta Pharmaceutica Sinica B*, 10(5):766-788.
- Zein, A. 2020. Pendeteksian virus corona dalam gambar x-ray menggunakan algoritma artificial intelligence dengan deep learning python. In *ESIT* 15(1):19-23.
- Zhu, N., Zhang, D., Wang, W., Li, X., Yang, B., Song, J., ... & Tan, W. 2020. A novel coronavirus from patients with pneumonia in China 2019. *New England journal of medicine*