

## DAFTAR PUSTAKA

- Alnajjar, R., Mostafa, A., Kandeil, A., & Al-Karmalawy, A. A. (2020). Molecular docking, molecular dynamics, and in vitro studies reveal the potential of angiotensin II receptor blockers to inhibit the COVID-19 main protease. *Heliyon*, 6(12), e05641. <https://doi.org/10.1016/j.heliyon.2020.e05641>
- Anwar, C., & Laifa, F. (2018). Hubungan Informasi dan Umur dengan Kecemasan Ibu Kanker Payudara pada Tindakan Kemoterapi di Rumah Sakit Umum Daerah Zainoel Abidin. *Journal of Healthcare Technology and Medicine*, 4(2), 185. <https://doi.org/10.33143/jhtm.v4i2.208>
- Arifin, B., & Ibrahim, S. (2018). Struktur, Bioaktivitas Dan Antioksidan Flavonoid. *Jurnal Zarah*, 6(1), 21–29. <https://doi.org/10.31629/zarah.v6i1.313>
- Aziz, F. K., Nukitasari, C., Oktavianingrum, F. A., Aryati, L. W., & Santoso, B. (2016). Hasil In Silico Senyawa Z12501572, Z00321025, SCB5631028 dan SCB13970547 dibandingkan Turunan Zerumbon terhadap Human Liver Glycogen Phosphorylase (115Q) sebagai Antidiabetes. *Jurnal Kimia VALENSI*, 2(2), 120–124. <https://doi.org/10.15408/jkv.v2i2.4170>
- Baksi, R., Singh, D. P., Borse, S. P., Rana, R., Sharma, V., & Nivsarkar, M. (2018). In vitro and in vivo anticancer efficacy potential of Quercetin loaded polymeric nanoparticles. *Biomedicine and Pharmacotherapy*, 106(July), 1513–1526. <https://doi.org/10.1016/j.biopha.2018.07.106>
- Ballard, C. R., & Maróstica, M. R. (2018). Health Benefits of Flavonoids. In *Bioactive Compounds: Health Benefits and Potential Applications*. Elsevier Inc. <https://doi.org/10.1016/B978-0-12-814774-0.00010-4>
- Basith, S., Cui, M., Macalino, S. J. Y., Park, J., Clavio, N. A. B., Kang, S., & Choi, S. (2018). Exploring G protein-coupled receptors (GPCRs) ligand space via cheminformatics approaches: Impact on rational drug design. *Frontiers in Pharmacology*, 9(MAR), 1–26. <https://doi.org/10.3389/fphar.2018.00128>
- Binotto, M., Reinert, T., Werutsky, G., Zaffaroni, F., & Schwartsmann, G. (2020). Health-related quality of life before and during chemotherapy in patients with early-stage breast cancer. *Ecancermedicalscience*, 14, 1–11. <https://doi.org/10.3332/ECANCER.2020.1007>
- Chandra, I., Nayak, C., & Singh, S. K. (2021). Predicting Protein Folding and Protein Stability by Molecular Dynamics Simulations for Computational Drug Discovery. In *Innovations and Implementations of Computer Aided Drug Discovery Strategies in Rational Drug Design*. [https://doi.org/10.1007/978-981-15-8936-2\\_7](https://doi.org/10.1007/978-981-15-8936-2_7)
- Chen, X., Li, H., Tian, L., Li, Q., Luo, J., & Zhang, Y. (2020). Analysis of the Physicochemical Properties of Acaricides Based on Lipinski's Rule of Five. *Journal of Computational Biology*, 27(9), 1397–1406. <https://doi.org/10.1089/cmb.2019.0323>

- Chow, E., Rendleman, C. A., Bowers, K. J., Dror, R. O., H. D., Gullingsrud, J., Sacerdoti, F. D., & Shaw, D. E. (2008). Desmond Performance on a Cluster of Multicore Processors. *Simulation, July*, 1–14.
- CLC Bio Company. (2012). Molegro Virtual Docker User Manual. *User Manual*, 0, 327.
- Dermawan, D., Sumirtanurdin, R., & Dewantisari, D. (2019). Molecular Dynamics Simulation Estrogen Receptor Alpha againts Andrographolide as Anti Breast Cancer. *Indonesian Journal of Pharmaceutical Science and Technology*, 6(2), 65. <https://doi.org/10.24198/ijpst.v6i2.18168>
- Devarajan, P. V, Dandekar, P., & D'souza, A. A. (2019). Targeted Intracellular Drug Delivery by Receptor Mediated Endocytosis. In *AAPS Advances in the Pharmaceutical Sciences Series* (Vol. 39). <http://www.springer.com/series/8825>
- Dias, M. C., Pinto, D. C. G. A., & Silva, A. M. S. (2021). Plant flavonoids: Chemical characteristics and biological activity. *Molecules*, 26(17), 1–16. <https://doi.org/10.3390/molecules26175377>
- Domínguez Villa, F. X., Durán-Iturbide, N. A., & Ávila-Zárraga, J. G. (2021). Synthesis, molecular docking, and in silico ADME/Tox profiling studies of new 1-aryl-5-(3-azidopropyl)indol-4-ones: Potential inhibitors of SARS CoV-2 main protease. *Bioorganic Chemistry*, 106(October). <https://doi.org/10.1016/j.bioorg.2020.104497>
- Eberhardt, J., Santos-Martins, D., Tillack, A. F., & Forli, S. (2021). AutoDock Vina 1.2.0: New Docking Methods, Expanded Force Field, and Python Bindings. *Journal of Chemical Information and Modeling*, 61(8), 3891–3898. <https://doi.org/10.1021/acs.jcim.1c00203>
- Elengoe, A., Kumar, Selvam, S., Selvarajah, M., Manikam, H., & Vijaya, R. (2022). Sequence analysis and structure prediction of malaysia sars-cov-2 strain's structural and accessory proteins. In *Biointerface Research in Applied Chemistry* (Vol. 12, Issue 3). <https://doi.org/10.33263/BRIAC123.32593304>
- Ezzati, M., Yousefi, B., Velaei, K., & Safa, A. (2020). A review on anti-cancer properties of Quercetin in breast cancer. *Life Sciences*, 248(September 2019). <https://doi.org/10.1016/j.lfs.2020.117463>
- Ferrari, I. V, & Mario, M. Di. (2022). Comparison and Prediction of toxicity parameters of principal Aflatoxins , antimicrobial compounds and Antifungal Drugs by pKCSM server. *International Journal of Scientific Research in Biological Sciences*, 9(1), 48–52.
- Frimayanti, N., Djohari, M., & Khusnah, A. N. (2021). Molekular Docking Senyawa Analog Kalkon sebagai Inhibitor untuk Sel Kanker Paru-Paru A549. *Jurnal Ilmu Kefarmasian Indonesia*, 19(1), 87. <https://doi.org/10.35814/jifi.v19i1.765>
- Gaillard, T. (2018). Evaluation of AutoDock and AutoDock Vina on the CASF-2013 Benchmark. *Journal of Chemical Information and Modeling*, 58(8),

- 1697–1706. <https://doi.org/10.1021/acs.jcim.8b00312>
- Globocan. (2020). Cancer Incident in Indonesia. *International Agency for Research on Cancer*, 858, 1–2. <https://gco.iarc.fr/today/data/factsheets/populations/360-indonesia-fact-sheets.pdf>
- Gyebi, G. A., Ogunro, O. B., Adegunloye, A. P., Ogunyemi, O. M., & Afolabi, S. O. (2021). Potential inhibitors of coronavirus 3-chymotrypsin-like protease (3CLpro): an in silico screening of alkaloids and terpenoids from African medicinal plants. *Journal of Biomolecular Structure and Dynamics*, 39(9), 3396–3408. <https://doi.org/10.1080/07391102.2020.1764868>
- Haberkorn, U. (2019). What is cancer? *Advances in Nuclear Oncology*: 62(4), 1–16. <https://doi.org/10.3109/9781420091380-2>
- Halder, S. K., Ahmad, I., Shathi, J. F., Mim, M. M., Hassan, M. R., Jewel, M. J. I., Dey, P., Islam, M. S., Patel, H., Morshed, M. R., Shakil, M. S., & Hossen, M. S. (2022). A Comprehensive Study to Unleash the Putative Inhibitors of Serotype2 of Dengue Virus: Insights from an In Silico Structure-Based Drug Discovery. *Molecular Biotechnology*, 0123456789. <https://doi.org/10.1007/s12033-022-00582-1>
- Hanif, A. U., Lukis, P. A., & Fadlan, A. (2021). Pengaruh Minimisasi Energi MMFF94 dengan MarvinSketch dan Open Babel PyRx pada Penambatan Molekular Turunan Oksindola Tersubstitusi. *ALCHEMY: JOURNAL OF CHEMISTRY*.
- Hartini, S., Winarsih, B. D., Galih, E., Nugroho, Z., Studi, P., & Ners, P. (2020). *Peningkatan Pengetahuan Perawat Untuk Perawatan Anak Penderita Kanker*. 3(2), 141–149.
- Hollingsworth, S. A., & Dror, R. O. (2018). Molecular Dynamics Simulation for All. *Neuron*, 99(6), 1129–1143. <https://doi.org/10.1016/j.neuron.2018.08.011>
- Ivanović, V., Rančić, M., Arsić, B., & Pavlović, A. (2020). Lipinski's rule of five, famous extensions and famous exceptions. *Popular Scientific Article*, 3(1), 171–177.
- Karak, P. (2019). Biological Activities of Flavonoids: An Overview. *International Journal of Pharmaceutical Sciences and Research*, 10(4), 1567–1574. [https://doi.org/10.13040/IJPSR.0975-8232.10\(4\).1567-74](https://doi.org/10.13040/IJPSR.0975-8232.10(4).1567-74)
- Kikuchi, H., Yuan, B., Hu, X., & Okazaki, M. (2019). Chemopreventive and anticancer activity of flavonoids and its possibility for clinical use by combining with conventional chemotherapeutic agents. *American Journal of Cancer Research*, 9(8), 1517–1535. <http://www.ncbi.nlm.nih.gov/pubmed/31497340%0Ahttp://www.ncbi.nlm.nih.gov/articlerender.fcgi?artid=PMC6726994>
- Kim, S., Chen, J., Cheng, T., Gindulyte, A., He, J., He, S., Li, Q., Shoemaker, B. A., Thiessen, P. A., Yu, B., Zaslavsky, L., Zhang, J., & Bolton, E. E. (2021). PubChem in 2021: New data content and improved web interfaces. *Nucleic Acids Research*, 49(D1), D1388–D1395. <https://doi.org/10.1093/nar/gkaa971>

- Ku, Y. S., Ng, M. S., Cheng, S. S., Lo, A. W. Y., Xiao, Z., Shin, T. S., Chung, G., & Lam, H. M. (2020). Understanding the composition, biosynthesis, accumulation and transport of flavonoids in crops for the promotion of crops as healthy sources of flavonoids for human consumption. *Nutrients*, 12(6), 1–23. <https://doi.org/10.3390/nu12061717>
- Kumar, S., Sharma, P. P., Shankar, U., Kumar, D., Joshi, S. K., Pena, L., Durvasula, R., Kumar, A., Kempaiah, P., Poonam, & Rathi, B. (2020). Discovery of New Hydroxyethylamine Analogs against 3CLproProtein Target of SARS-CoV-2: Molecular Docking, Molecular Dynamics Simulation, and Structure-Activity Relationship Studies. *Journal of Chemical Information and Modeling*, 60(12), 5754–5770. <https://doi.org/10.1021/acs.jcim.0c00326>
- Leung, S. H., Bodkin, M. J., von Delft, F., Brennan, P. E., & Morris, G. M. (2019). SuCOS is better than RMSD for evaluating fragment elaboration and docking poses. *ChemRxiv*, 1–47.
- Lipinski, C. A. (2004). Lead- and drug-like compounds: The rule-of-five revolution. *Drug Discovery Today: Technologies*, 1(4), 337–341. <https://doi.org/10.1016/j.ddtec.2004.11.007>
- Liu, X., Le Bourvellec, C., Guyot, S., & Renard, C. M. G. C. (2021). Reactivity of flavanols: Their fate in physical food processing and recent advances in their analysis by depolymerization. *Comprehensive Reviews in Food Science and Food Safety*, 20(5), 4841–4880. <https://doi.org/10.1111/1541-4337.12797>
- Malgorzata Brodowska, K. (2017). Natural flavonoids: classification, potential role, and application of flavonoid analogues. *European Journal of Biological Research*, 7(2), 108–123.
- Mardianingrum, R., Ruswanto, R., Agustien, G. S., & Nuraisah, A. (2020). The Active Compound of Bangle Essential Oil as Cyclooxygenase-2 (Cox-2) Inhibitor: In Silico Approach. *Jurnal Kimia Valensi*, 6(2), 156–168. <https://doi.org/10.15408/jkv.v6i2.16943>
- Meli, R., & Biggin, P. C. (2020). Spyrmsd: Symmetry-corrected RMSD calculations in Python. *Journal of Cheminformatics*, 12(1), 1–7. <https://doi.org/10.1186/s13321-020-00455-2>
- Miller, K. D., Nogueira, L., Mariotto, A. B., Rowland, J. H., Yabroff, K. R., Alfano, C. M., Jemal, A., Kramer, J. L., & Siegel, R. L. (2019). Cancer treatment and survivorship statistics, 2019. *CA: A Cancer Journal for Clinicians*, 69(5), 363–385. <https://doi.org/10.3322/caac.21565>
- Mvondo, J. G. M., Matondo, A., Mawete, D. T., Bambi, S.-M. N., Mbala, B. M., & Lohohola, P. O. (2021). In Silico ADME/T Properties of Quinine Derivatives using SwissADME and pkCSM Webservers. *International Journal of TROPICAL DISEASE & Health*, 42(11), 1–12. <https://doi.org/10.9734/ijtdh/2021/v42i1130492>
- Nagula, R. L., & Waikar, S. (2019). Recent advances in topical delivery of flavonoids: A review. *Journal of Controlled Release*, 296(January), 190–201.

<https://doi.org/10.1016/j.jconrel.2019.01.029>

- Naja, A. P., Andika, & Mi'rajunnisa. (2022). Studi In Silico Senyawa Metabolit Sekunder Daun Sirih Hijau (*Piper betle L*) Sebagai Inhibitor Enzim Main Protease (Mpro) Pada SARS-CoV-2. *Medical Sains: Jurnal Ilmiah Kefarmasian*, 7(2), 343–356.
- Nusantoro, Y. R., & Fadlan, A. (2021). The Effect of Energy Minimization on The Molecular Docking of Acetone-Based Oxindole Derivatives. *JKPK (Jurnal Kimia Dan Pendidikan Kimia)*, 6(1), 69. <https://doi.org/10.20961/jkpk.v6i1.45467>
- Pinzi, L., & Rastelli, G. (2019). Molecular docking: Shifting paradigms in drug discovery. *International Journal of Molecular Sciences*, 20(18). <https://doi.org/10.3390/ijms20184331>
- Pires, D. E. V., Blundell, T. L., & Ascher, D. B. (2015). pkCSM: Predicting small-molecule pharmacokinetic and toxicity properties using graph-based signatures. *Journal of Medicinal Chemistry*, 58(9), 4066–4072. <https://doi.org/10.1021/acs.jmedchem.5b00104>
- Pratama, P. R., Isman, F., & Fadlan, A. (2022). Penyelidikan Aktivitas Antikanker Payudara Oleh Minyak Atsiri Bunga Michelia Alba Secara in Silico. *Jurnal Ilmu Kimia Dan Terapan*, 9(1).
- Protein Data Bank. (n.d.). *Enabling Breakthroughs in Scientific and Biomedical Research and Education*. <https://www.rcsb.org/>
- Puspita, P. J., Ambarsari, L., Adiva, A., & Sumaryada, T. I. (2021). In Silico Analysis of Glucose Oxidase H516r and H516d Mutations for an Enzymatic Fuel Cell. *Jurnal Kimia Valensi*, 7(2), 83–93. <https://doi.org/10.15408/jkv.v7i2.20733>
- Putra, P. P., Fauzana, A., & Lucida, H. (2020). Analisis Sifat Fisika-Kimia, Potensi Target dan Toksikologi Senyawa Isolat Murni dari Bahan Alam dengan Metode In Silico. *Indonesian Journal of Pharmaceutical Science and Technology Journal Homepage*, 7(3), 107–117. <http://jurnal.unpad.ac.id/ijpst/UNPAD>
- Qasaymeh, R. M., Rotondo, D., Oosthuizen, C. B., Lall, N., & Seidel, V. (2019). Predictive binding affinity of plant-derived natural products towards the protein kinase g enzyme of mycobacterium tuberculosis (Mtpkng). *Plants*, 8(11), 1–14. <https://doi.org/10.3390/plants8110477>
- Rachmania, R. A., Hariyanti, H., Zikriah, R., & Sultan, A. (2018). Studi In Silico Senyawa Alkaloid Herba Bakung Putih (*Crinum Asiaticum L.*) pada Penghambatan Enzim Siklooksigenase (COX). *Jurnal Kimia VALENSI*, 4(2), 124–136. <https://doi.org/10.15408/jkv.v4i2.7686>
- Rahayu, S. M., & Suprapti, T. (2020). Kemoterapi Di Bandung Cancer Society Life Quality of Cancer Patients Through. *Jurnal Wacana Kesehatan*, 5(2), 551–556. <https://jurnal.akperdharmawacana.ac.id/index.php/wacana/article/view/148>

- Rathod, S., Shinde, K., Porlekar, J., Choudhari, P., Dhavale, R., Mahuli, D., Tamboli, Y., Bhatia, M., Haval, K. P., Al-Sehem, A. G., & Pannipara, M. (2022). Computational Exploration of Anti-cancer Potential of Flavonoids against Cyclin-Dependent Kinase 8: An In Silico Molecular Docking and Dynamic Approach. *ACS Omega*. <https://doi.org/10.1021/acsomega.2c04837>
- Rena, S. R., Nurhidayah, N., & Rustan, R. (2022). Analisis Molecular Docking Senyawa Garcinia Mangostana L Sebagai Kandidat Anti SARS-CoV-2. *Jurnal Fisika Unand*, 11(1), 82–88. <https://doi.org/10.25077/jfu.11.1.82-88.2022>
- Richard B. Silverman, M. W. H. (2014). *The Organic Chemistry Of Drug Design And Drug Action*. Academic Press.
- Rudrapal, M., Khan, J., Dukhyil, A. A. Bin, Alarousy, R. M. I. I., Attah, E. I., Sharma, T., Khairnar, S. J., & Bendale, A. R. (2021). Chalcone scaffolds, bioprecursors of flavonoids: Chemistry, bioactivities, and pharmacokinetics. *Molecules*, 26(23), 1–21. <https://doi.org/10.3390/molecules26237177>
- Ruswanto, Mardianingrum, R., Siswandono, & Dini Kesuma. (2020). *Reverse Docking, Molecular Docking, Absorption, Distribution, and Toxicity Prediction of Artemisinin as an Anti-diabetic Candidate*. 15(2), 88–96.
- Ruswanto, Nofianti, T., Mardianingrum, R., Lestari, T., & Sepriliani, A. (2018). Desain dan Studi In Silico Senyawa Turunan Kuwanon-H sebagai Kandidat Obat Anti-HIV. *Jurnal Kimia VALENSI*, 4(1), 57–66. <https://doi.org/10.15408/jkv.v4i1.6867>
- Ruswanto, R. (2015). Molecular Docking Empat Turunan Isonicotinohydrazide Pada Mycobacterium Tuberculosis Enoyl-Acyl Carrier Protein Reductase (InhA). *Jurnal Kesehatan Bakti Tunas Husada: Jurnal Ilmu-Ilmu Keperawatan, Analis Kesehatan Dan Farmasi*, 13(1), 135–141. <https://doi.org/10.36465/jkbth.v13i1.25>
- Ruswanto, R., Garna, I. M., Tuslinah, L., Mardianingrum, R., Lestari, T., & Nofianti, T. (2018). Kuersetin, Penghambat Uridin 5-Monofosfat Sintase Sebagai Kandidat Anti-kanker. *ALCHEMY Jurnal Penelitian Kimia*, 14(2), 236. <https://doi.org/10.20961/alchemy.14.2.14396.236-254>
- Ruswanto, R., Mardianingrum, R., & Yanuar, A. (2022). Computational Studies of Thiourea Derivatives as Anticancer Candidates through Inhibition of Sirtuin-1 (SIRT1). *Jurnal Kimia Sains Dan Aplikasi*, 25(3), 87–96. <https://doi.org/10.14710/jksa.25.3.87-96>
- Ruswanto, R., Nofianti, T., Mardianingrum, R., Kesuma, D., & Siswandono. (2022). Design, molecular docking, and molecular dynamics of thiourea-iron (III) metal complexes as NUDT5 inhibitors for breast cancer treatment. *Heliyon*, 8(9). <https://doi.org/10.1016/j.heliyon.2022.e10694>
- Sabe, V. T., Ntombela, T., Jhamba, L. A., Maguire, G. E. M., Govender, T., Naicker, T., & Kruger, H. G. (2021). Current trends in computer aided drug design and a highlight of drugs discovered via computational techniques: A

- review. *European Journal of Medicinal Chemistry*, 224, 113705. <https://doi.org/10.1016/j.ejmech.2021.113705>
- Salman, M. M., Al-Obaidi, Z., Kitchen, P., Loreto, A., Bill, R. M., & Wade-Martins, R. (2021). Advances in Applying Computer-Aided Drug Design for Neurodegenerative Diseases Mootaz. *International Journal of Molecular Sciences Review*, 42(18), 3436–3446. <https://doi.org/10.1021/jm990129n>
- Salmaso, V., & Moro, S. (2018). Bridging molecular docking to molecular dynamics in exploring ligand-protein recognition process: An overview. *Frontiers in Pharmacology*, 9(AUG), 1–16. <https://doi.org/10.3389/fphar.2018.00923>
- Sari, I. W., Junaidin, & Pratiwi, D. (2020). *Molecular Docking Study Flavonoid Compounds From Kumis Kucing (Orthosiphon stamineus B.) In α-Glukosidase Receptor as Antidiabetic Type 2*. VII(2), 54–60.
- Seleem, D., Pardi, V., & Murata, R. M. (2017). Review of flavonoids: A diverse group of natural compounds with anti-Candida albicans activity in vitro. *Archives of Oral Biology*, 76, 76–83. <https://doi.org/10.1016/j.archoralbio.2016.08.030>
- Selvakumar, P., Badgeley, A., Murphy, P., Anwar, H., Sharma, U., Lawrence, K., & Lakshmikuttyamma, A. (2020). Flavonoids and Other Polyphenols Act as Epigenetic. *Nutrients*, 12, 1–18. <https://acsjournals.onlinelibrary.wiley.com/doi/full/10.1002/cncr.30614>
- Sharma, V. R., Panwar, A., & Sharma, A. K. (2020). Molecular Dynamic Simulation Study on Chromones and Flavonoids for the In Silico Designing of a Potential Ligand Inhibiting mTOR Pathway in Breast Cancer. *Current Pharmacology Reports*, 6(6), 373–379. <https://doi.org/10.1007/s40495-020-00246-1>
- Shaweta, S., Akhil, S., & Utsav, G. (2021). Molecular Docking studies on the Anti-fungal activity of Allium sativum (Garlic) against Mucormycosis (black fungus) by BIOVIA discovery studio visualizer 21.1.0.0. *Annals of Antivirals and Antiretrovirals*, 5, 028–032. <https://doi.org/10.17352/aaa.000013>
- Siahaan, P., Darmastuti, N. E., Aisyafalah, S., Sasongko, N. A., Hudiyanti, D., Asy'ari, M., & Prasasty, V. D. (2020). Probing the interaction between EC1-EC2 domain of E-cadherin with conformational structure of cyclic ADTC7 (Ac-CDTPDC-NH2) peptide using molecular docking approach. *Journal of Physics: Conference Series*, 1524(1). <https://doi.org/10.1088/1742-6596/1524/1/012081>
- Singla, R. K., Dubey, A. K., Garg, A., Sharma, R. K., Fiorino, M., Ameen, S. M., Haddad, M. A., & Al-Hiary, M. (2019). Natural polyphenols: Chemical classification, definition of classes, subcategories, and structures. *Journal of AOAC International*, 102(5), 1397–1400. <https://doi.org/10.5740/jaoacint.19-0133>
- Surabhi, S., & Singh, B. (2018). Computer Aided Drug Design: an Overview.

- Journal of Drug Delivery and Therapeutics*, 8(5), 504–509.  
<https://doi.org/10.22270/jddt.v8i5.1894>
- Suwignjo, P., Bsi, U., Irawan, E., Bsi, U., Anggraeni, M., Bsi, U., Pratiwi, A. N., & Bsi, U. (2019). Hubungan Dukungan Sosial Dengan Kualitas Hidup Pasien Kanker : Systematic Review. *Jurnal Keperawatan BSI*, 7(2), 142–152.
- Torres, P. H. M., Sodero, A. C. R., Jofily, P., & Silva-Jr, F. P. (2019). Key topics in molecular docking for drug design. *International Journal of Molecular Sciences*, 20(18), 1–29. <https://doi.org/10.3390/ijms20184574>
- Utami, W., Aziz, H. A., Fitriani, I. N., Zikri, A. T., Mayasri, A., & Nasrudin, D. (2020). In silico anti-inflammatory activity evaluation of some bioactive compound from ficus religiosa through molecular docking approach. *Journal of Physics: Conference Series*, 1563(1). <https://doi.org/10.1088/1742-6596/1563/1/012024>
- Velankar, S., Burley, S. K., Kurisu, G., Hoch, J. C., & Markley, J. L. (2021). Structural Proteomics High-Troughput Methods. In R. J. Owens (Ed.), *Nature Reviews Drug Discovery*. Humana press. <https://doi.org/https://doi.org/10.1007/978-1-0716-1406-8>
- Victory, A., Syahdi, R. R., & Yanuar, A. (2018). Virtual screening of Indonesian herbal database as murine double minute-2 (MDM2) inhibitor. *Pharmacognosy Journal*, 10(6), 1184–1189. <https://doi.org/10.5530/pj.2018.6.203>
- Vieira, T. F., & Sousa, S. F. (2019). Comparing AutoDock and Vina in ligand/decoy discrimination for virtual screening. *Applied Sciences (Switzerland)*, 9(21). <https://doi.org/10.3390/app9214538>
- Wang, T. yang, Li, Q., & Bi, K. shun. (2018). Bioactive flavonoids in medicinal plants: Structure, activity and biological fate. *Asian Journal of Pharmaceutical Sciences*, 13(1), 12–23. <https://doi.org/10.1016/j.japs.2017.08.004>
- Weni, M., Safithri, M., & Seno, D. S. H. (2020). Molecular Docking of Active Compounds Piper crocatum on the A-Glucosidase Enzyme as Antidiabetic. *Indonesian Journal of Pharmaceutical Science and Technology*, 7(2), 64. <https://doi.org/10.24198/ijpst.v7i2.21120>
- World Health Organization. (2022). *Cancer*. <https://www.who.int/news-room/fact-sheets/detail/cancer>
- Yeni, Y., & Rachmania, R. A. (2022). The Prediction of Pharmacokinetic Properties of Compounds in Hemigraphis alternata (Burm.F.) T. Ander Leaves Using pkCSM. *Indonesian Journal of Chemistry*, 22(4), 1081–1089. <https://doi.org/10.22146/ijc.73117>
- Yusuf, M., Hardianto, A., Muchtaridi, M., Nuwarda, R. F., Padjadjaran, U., & Java, W. (2018). Introduction of Docking-Based Virtual Screening Work flow Using Desktop Personal Computer. In *Encyclopedia of Bioinformatics and Computational Biology*. Elsevier Ltd. <https://doi.org/10.1016/B978-0-12-809633-8.20277-X>

Zafrial, R. M., Amalia, R., Studi, P., Farmasi, S., Farmasi, F., & Padjadjaran, U. (2018). *Artikel Tinjauan: Anti Kanker Dari Tanaman Herbal.* 16, 15–23.

Zustika, D. S., Mardianingrum, R., & Fizriani, R. (2022). *Monograf Kajian Studi Komputasi Kompleks Logam Platinum (II)-tiourea Sebagai Kandidat Antikanker.* Rumah Cemerlang Indonesia.