

DAFTAR PUSTAKA

- Abdolmaleki, A., Shiri, F., & Ghasemi, J. B. (2021). Use of Molecular Docking as a Decision-Making Tool in Drug Discovery. *Molecular Docking for Computer-Aided Drug Design: Fundamentals, Techniques, Resources and Applications*, 229–243. <https://doi.org/10.1016/B978-0-12-822312-3.00010-2>
- Agarwal, S., & Mehrotra, R. (2016). An overview of Molecular Docking. *JSM Chem*, 4(2), 1024. <https://www.researchgate.net/publication/303897563>
- Agu, P. C., Afiukwa, C. A., Orji, O. U., Ezech, E. M., Ofoke, I. H., Ogbu, C. O., Ugwuja, E. I., & Aja, P. M. (2023). Molecular docking as a tool for the discovery of molecular targets of nutraceuticals in diseases management. *Scientific Reports*, 13(1). <https://doi.org/10.1038/s41598-023-40160-2>
- Akbar, A., Shaiq Ali, M., Zikr-Ur-Rehman, S., Lateef, M., & Saify, Z. S. (2020). ISOLATION AND BIOLOGICAL SCREENING OF SECONDARY METABOLITES FROM STEM BARK OF ALSTONIA SCHOLARIS (L.) R. Br. In *INT. J. BIOL. BIOTECH* (Vol. 17, Issue 1).
- Bagheri, G., Ayatollahi, S. A., Ramírez-Alarcón, K., Fernández, M., Salehi, B., Forman, K., Martorell, M., Moghadam, M. H., & Sharifi-Rad, J. (2020). Phytochemical screening of *Alstonia scholaris* leaf and bark extracts and their antimicrobial activities. *Cellular and Molecular Biology*, 66(4), 270–279. <https://doi.org/10.14715/cmb/2020.66.4.32>
- Basics of LC/MS*. (n.d.).
- Beccaria, M., & Cabooter, D. (2020). Current developments in LC-MS for pharmaceutical analysis. In *Analyst* (Vol. 145, Issue 4, pp. 1129–1157). Royal Society of Chemistry. <https://doi.org/10.1039/c9an02145k>
- Budiarti, M., Maruzy, A., Mujahid, R., Sari, A. N., Jokopriyambodo, W., Widayat, T., & Wahyono, S. (2020). The use of antimalarial plants as traditional treatment in Papua Island, Indonesia. *Heliyon*, 6(12). <https://doi.org/10.1016/j.heliyon.2020.e05562>
- Cavaliere, C., Antonelli, M., Capriotti, A. L., La Barbera, G., Montone, C. M., Piovesana, S., & Laganà, A. (2019). A Triple Quadrupole and a Hybrid Quadrupole Orbitrap Mass Spectrometer in Comparison for Polyphenol Quantitation. *Journal of Agricultural and Food Chemistry*, 67(17), 4885–4896. <https://doi.org/10.1021/acs.jafc.8b07163>
- Chhajed, M., Jain, A., Pagariya, A., Dwivedi, S., Jain, N., & Taile, V. (2023). *Alstonia scholaris* Linn. R. Br.: An Assessment of its Botany, Conventional Utilization, Phytochemistry and Pharmacology. *Pharmacognosy Alstonia Scholaris Reviews*, 17(33), 184–203. <https://doi.org/10.5530/097627870302>
- Chidella, K. S., Dasari, V. B., & Anireddy, J. (2021). Simultaneous and Trace Level Quantification of Five Potential Genotoxic Impurities in Ranolazine Active

Pharmaceutical Ingredient Using LC-MS/MS. *American Journal of Analytical Chemistry*, 12(01), 1–14. <https://doi.org/10.4236/AJAC.2021.121001>

- Cimanga, R. K., Nsaka, S. L., Tshodi, M. E., Mbamu, B. M., Kikweta, C. M., Makila, F. B. M., Cos, P., Maes, L., Vlietinck, A. J., Exarchou, V., Tuenter, E., & Pieters, L. (2019). In vitro and in vivo antiplasmodial activity of extracts and isolated constituents of *Alstonia congensis* root bark. *Journal of Ethnopharmacology*, 242. <https://doi.org/10.1016/j.jep.2019.02.019>
- Condina, M. R., Dilmetz, B. A., Razavi Bazaz, S., Meneses, J., Majid, C., Warkiani, E., & Hoffmann, P. (2019). *Lab on a Chip Rapid separation and identification of beer spoilage bacteria by inertial microfluidics and MALDI-TOF mass spectrometry*. 19. <https://doi.org/10.1039/c9lc00152b>
- Cortese, M., Gigliobianco, M. R., Magnoni, F., Censi, R., & Di Martino, P. (2020). Compensate for or minimize matrix effects? strategies for overcoming matrix effects in liquid chromatography-mass spectrometry technique: A tutorial review. In *Molecules* (Vol. 25, Issue 13). MDPI AG. <https://doi.org/10.3390/molecules25133047>
- Fan, J., Fu, A., & Zhang, L. (2019). Progress in molecular docking. *Quantitative Biology*, 7(2), 83–89. <https://doi.org/10.1007/S40484-019-0172-Y/METRICS>
- Gupta, S., Belle, V. S., Kumbarakeri Rajashekhar, R., Jogi, S., & Prabhu, R. K. (2018). Correlation of Red Blood Cell Acetylcholinesterase Enzyme Activity with Various RBC Indices. *Indian Journal of Clinical Biochemistry: IJCB*, 33(4), 445–449. <https://doi.org/10.1007/s12291-017-0691-0>
- Hu, Y., Wang, Z., Xia, F., Yang, W., Liu, Y. C., & Wan, J. B. (2021). Simultaneous quantification of bioactive components in Chinese herbal spirits by ultra-high performance liquid chromatography coupled to triple-quadrupole mass spectrometry (UHPLC–QQQ–MS/MS). *Chinese Medicine (United Kingdom)*, 16(1). <https://doi.org/10.1186/s13020-021-00435-0>
- Jensen, A. R., Adams, Y., & Hviid, L. (2020). Cerebral Plasmodium falciparum malaria: The role of PfEMP1 in its pathogenesis and immunity, and PfEMP1-based vaccines to prevent it. *Immunological Reviews*, 293(1), 230–252. <https://doi.org/10.1111/IMR.12807>
- Kemenkes: *Indonesia Targetkan Bebas Malaria pada 2030*. (n.d.). Retrieved June 18, 2023, from <https://www.voaindonesia.com/a/kemenkes-indonesia-targetkan-bebas-malaria-pada-2030-/6540980.html>
- Liquid Chromatography*. (n.d.). Retrieved July 22, 2023, from <https://chem.libretexts.org/@go/page/309>
- Lopez-Perez, M., Van Der Puije, W., Castberg, F. C., Ofori, M. F., & Hviid, L. (2020). Binding of human serum proteins to Plasmodium falciparum-infected erythrocytes and its association with malaria clinical presentation. *Malaria Journal*, 19(1). <https://doi.org/10.1186/s12936-020-03438-8>

- Ma, R., Lian, T., Huang, R., Renn, J. P., Petersen, J. D., Zimmerberg, J., Duffy, P. E., & Tolia, N. H. (2021). Structural basis for placental malaria mediated by *Plasmodium falciparum* VAR2CSA. *Nature Microbiology*, 6(3), 380–391. <https://doi.org/10.1038/s41564-020-00858-9>
- Mangou, K., Moore, A. J., Thiam, L. G., Ba, A., Orfanó, A., Desamours, I., Ndegwa, D. N., Goodwin, J., Guo, Y., Sheng, Z., Patel, S. D., Diallo, F., Sene, S. D., Pouye, M. N., Faye, A. T., Thiam, A., Nunez, V., Diagne, C. T., Sadio, B. D., ... Bei, A. K. (2022). Structure-guided insights into potential function of novel genetic variants in the malaria vaccine candidate PfRh5. *Scientific Reports*, 12(1). <https://doi.org/10.1038/s41598-022-23929-9>
- MASS SPECTROMETRY. (n.d.). <https://chem.libretexts.org/@go/page/319>
- Microbe Notes - Online Microbiology and Biology Study Notes. (n.d.). Retrieved July 22, 2023, from <https://microbenotes.com/>
- Olumese, P. (n.d.). *WHO Guidelines for the Diagnosis and Treatment of Malaria-updates*.
- Pandey, K., Shevkar, C., Bairwa, K., & Kate, A. S. (2020). Pharmaceutical perspective on bioactives from *Alstonia scholaris*: ethnomedicinal knowledge, phytochemistry, clinical status, patent space, and future directions. *Phytochemistry Reviews* 2020 19:1, 19(1), 191–233. <https://doi.org/10.1007/S11101-020-09662-Z>
- Possemiers, H., Vandermosten, L., & Van Den Steen, P. E. (2021). Etiology of lactic acidosis in malaria. In *PLoS Pathogens* (Vol. 17, Issue 1). Public Library of Science. <https://doi.org/10.1371/journal.ppat.1009122>
- Prajurit TNI Gugur Terkena Malaria di Papua. (n.d.). Retrieved December 22, 2022, from <https://news.detik.com/berita/d-4830273/prajurit-tni-gugur-terkena-malaria-di-papua>
- Pratt-Riccio, L. R., de OliveiraBaptista, B., Rodrigues Torres, V., Bianco-Junior, C., de SouzaPerce-Da-Silva, D., Pratt Riccio, E. K., da Costa Lima-Junior, J., Rivas Totino, P. R., Capatti Cassiano, G., Moreno Storti-Melo, L., Dantas Machado, R. L., de Oliveira-Ferreira, J., Maria Banic, D., de Moura Carvalho, L. J., & Daniel-Ribeiro, C. T. (2019). Chloroquine and mefloquine chemoresistance profiles are not related to the Circumsporozoite Protein (CSP) VK210 subtypes in field isolates of *Plasmodium vivax* from Manaus, Brazilian Amazon. *Memorias Do Instituto Oswaldo Cruz*, 114(6). <https://doi.org/10.1590/0074-02760190054>
- Protein | Definition, Structure, & Classification | Britannica. (n.d.). Retrieved August 28, 2023, from <https://www.britannica.com/science/protein>
- Ralte, L., Khiangte, L., Thangjam, N. M., Kumar, A., & Singh, Y. T. (2022). GC–MS and molecular docking analyses of phytochemicals from the underutilized plant, *Parkia timoriana* revealed candidate anti-cancerous and anti-inflammatory agents. *Scientific Reports*, 12(1). <https://doi.org/10.1038/S41598-022-07320-2>

- Rawe, S. L., & McDonnell, C. (2020). The cinchona alkaloids and the aminoquinolines. In *Antimalarial Agents: Design and Mechanism of Action* (pp. 65–98). Elsevier. <https://doi.org/10.1016/B978-0-08-101210-9.00003-2>
- Rodell, R., Tsao, N., Ganguly, A., & Mosammaparast, N. (2022). Use of high performance liquid chromatography-mass spectrometry (HPLC-MS) to quantify modified nucleosides. *Methods in Molecular Biology (Clifton, N.J.)*, *2444*, 125. https://doi.org/10.1007/978-1-0716-2063-2_8
- Rosmalena, Prasasty, V. D., & Hanafi, M. (2018). Novel cinchona alkaloid derivatives as potential antimalarial agents through receptor-inhibitor interaction fingerprint and biosynthesis design. *Oriental Journal of Chemistry*, *34*(5), 2643–2650. <https://doi.org/10.13005/ojc/340556>
- Singh, A., Daniel, K., Jain, S. K., & Vengrulkar, S. (2023). Phytochemical Screening and in Vitro Anti-Plasmodium Falciparum Activity of Alstonia Scholaris. *CURRENT SCIENCE CS*, *3*(4), 351–356. <https://doi.org/10.52845/CS/2023-3-4-1>
- Sivaramakrishnan, M., Kandaswamy, K., Natesan, S., Devarajan, R. D., Ramakrishnan, S. G., & Kothandan, R. (2020). Molecular docking and dynamics studies on plasmepsin V of malarial parasite Plasmodium vivax. *Informatics in Medicine Unlocked*, *19*. <https://doi.org/10.1016/j.imu.2020.100331>
- Stanzione, F., Giangreco, I., & Cole, J. C. (2021). Use of molecular docking computational tools in drug discovery. In *Progress in Medicinal Chemistry* (Vol. 60, pp. 273–343). Elsevier B.V. <https://doi.org/10.1016/bs.pmch.2021.01.004>
- Trauner, D., & Paz, B. M. (2021). Antimalarial Heterocycles: Tackling Chloroquine-Resistant Plasmodium falciparum. *Synfacts*, *17*(08), 0934. <https://doi.org/10.1055/S-0040-1719680>
- Varo, R., Chaccour, C., & Bassat, Q. (2020). Update on malaria. *Medicina Clínica (English Edition)*, *155*(9), 395–402. <https://doi.org/10.1016/J.MEDCLE.2020.05.024>
- Wang, C. F., & Li, L. (2022). Instrument-type effects on chemical isotope labeling LC-MS metabolome analysis: Quadrupole time-of-flight MS vs. Orbitrap MS. *Analytica Chimica Acta*, *1226*, 340255. <https://doi.org/10.1016/J.ACA.2022.340255>
- Wang, J., Jiang, N., Sang, X., Yang, N., Feng, Y., Chen, R., Wang, X., & Chen, Q. (2021). Protein modification characteristics of the malaria parasite plasmodium falciparum and the infected erythrocytes. *Molecular and Cellular Proteomics*, *20*. <https://doi.org/10.1074/MCP.RA120.002375>
- Weiss, G. E., Ragotte, R. J., Quinkert, D., Lias, A. M., Dans, M. G., Boulet, C., Looker, O., Ventura, O. D., Williams, B. G., Crabb, B. S., Draper, S. J., & Gilson, P. R. (2023). The dual action of human antibodies specific to Plasmodium falciparum PfRH5 and PfCyRPA: Blocking invasion and inactivating extracellular merozoites. *PLoS Pathogens*, *19*(9). <https://doi.org/10.1371/journal.ppat.1011182>

- Widyawaruyanti, A., Tantular, I., Hafid, A. F., Lardo, S., Widyawaruyanti [], A., Tantular [], I., Budiman Σ, W., Sulisty, B., Fakhri, A., Hafid [], A. F., Rusdianto], D., Rimba Σ, B. Y., Indonesia, N. [], & Badau, K. (2016). *Preliminary Study of Safety and Toxicity of Cempedak Capsules as an Alternative Complementary Drug for Malaria Prophylaxis at Nanga Badau, Kalimantan* The user has requested enhancement of the downloaded file. *Preliminary Study of Safety and Toxicity of Cempedak Capsules as an Alternative Complementary Drug for Malaria Prophylaxis at Nanga*. <https://www.researchgate.net/publication/315797918>
- Wierbowski, S. D., Wingert, B. M., Zheng, J., & Camacho, C. J. (2020). Cross-docking benchmark for automated pose and ranking prediction of ligand binding. *Protein Science*, 29(1), 298–305. <https://doi.org/10.1002/pro.3784>
- World malaria report 2022 - World Health Organization - Google Books*. (n.d.). Retrieved June 17, 2023, from https://books.google.co.id/books?hl=en&lr=&id=ST-hEAAAQBAJ&oi=fnd&pg=PR6&dq=malaria&ots=YYAZPcUksm&sig=n5WEfmIX2NMrv4LxHTWn4tCHaYs&redir_esc=y#v=onepage&q=malaria&f=false
- Yu, Y., Yao, C., & Guo, D. an. (2021). Insight into chemical basis of traditional Chinese medicine based on the state-of-the-art techniques of liquid chromatography–mass spectrometry. In *Acta Pharmaceutica Sinica B* (Vol. 11, Issue 6, pp. 1469–1492). Chinese Academy of Medical Sciences. <https://doi.org/10.1016/j.apsb.2021.02.017>
- Zhao, M. xue, Cai, J., Yang, Y., Xu, J., Liu, W. yuan, Akihisa, T., Li, W., Kikuchi, T., Feng, F., & Zhang, J. (2023a). Traditional uses, chemical composition and pharmacological activities of *Alstonia R. Br.* (Apocynaceae): A review. *Arabian Journal of Chemistry*, 16(8), 104857. <https://doi.org/10.1016/J.ARABJC.2023.104857>
- Zhao, M. xue, Cai, J., Yang, Y., Xu, J., Liu, W. yuan, Akihisa, T., Li, W., Kikuchi, T., Feng, F., & Zhang, J. (2023b). Traditional uses, chemical composition and pharmacological activities of *Alstonia R. Br.* (Apocynaceae): A review. In *Arabian Journal of Chemistry* (Vol. 16, Issue 8). Elsevier B.V. <https://doi.org/10.1016/j.arabjc.2023.104857>
- Zheng, J., Pan, H., Gu, Y., Zuo, X., Ran, N., Yuan, Y., Zhang, C., & Wang, F. (2019). Prospects for Malaria Vaccines: Pre-Erythrocytic Stages, Blood Stages, and Transmission-Blocking Stages. In *BioMed Research International* (Vol. 2019). Hindawi Limited. <https://doi.org/10.1155/2019/9751471>
- Zheng, L., Meng, J., Jiang, K., Lan, H., Wang, Z., Lin, M., Li, W., Guo, H., Wei, Y., & Mu, Y. (2022). Improving protein–ligand docking and screening accuracies by incorporating a scoring function correction term. *Briefings in Bioinformatics*, 23(3). <https://doi.org/10.1093/bib/bbac051>