

## DAFTAR PUSTAKA

- Abdillah, M. N., Ilmah, N. R., & Mahardhika, A. B. (2018). Penambatan Molekuler Senyawa Polifenolat Terhadap Enzim Reverse Transcriptase Sebagai Senyawa Antiretroviral (Hiv-1). *Jurnal Sains Dan Teknologi Farmasi Indonesia*, 6(1), 1–13. <https://doi.org/10.58327/jstfi.v6i1.59>
- Adriani. (2018). Prediksi Senyawa Bioaktif dari Tanaman Sanrego (*Lunasia amara Blanco*) Sebagai Inhibitor Enzim Siklooksigenase-2 (COX-2) Melalui Pendekatan Molecular Docking. *Jurnal Ilmiah Pena*, 1(1), 6–11.
- Agustina, R., Indrawati, D. T., & Masruhin, M. A. (2015). Aktivitas Ekstrak Daun Salam (*Eugenia Polyantha*) Sebagai Antiinflamasi Pada Tikus Putih (*Rattus Norvegicus*). *J. Trop. Pharm Chem*, 3(2), 120-123.
- Andri, A., & Bintoro Yudha. (2017). Distribusi Faktor Hiperurisemia terhadap Pasien Gout Artritis di Poliklinik Penyakit Dalam dan Radiologi RSUD Meuraxa Banda Aceh. *Jurnal Ilmiah Sains, Teknologi, Ekonomi, Sosial Dan Budaya*, 1(4), 62–65.
- Andriani, aidaa. (2016). Pengaruh Pemberian Air Rebusan Daun Salam (*Syzygium Polyanthum*) Terhadap Penurunan Kadar Asam Urat. *Jurnal Iptek Terapan*, 10(2), 112–119. <https://doi.org/10.22216/jit.2016.v10i2.440>
- Arwansyah, Ambarsari, L., & Sumaryada, T. I. (2014). Simulasi Docking Senyawa Kurkumin Dan Analognya Sebagai Inhibitor Enzim 12-Lipoksigenase. *Current Biochemistry*, 1(1), 11–19.
- Arwansyah, & Hasrianti. (2014). Simulasi Molecular Docking Senyawa Kurkumin dan Analognya Sebagai Selective Androgen Receptor Modulators (SARMs) Pada Kanker Prostat. *Jurnal Dinamika*, 5(2), 60–75.
- Banerjee, P., Dehnbostel, F. O., & Preissner, R. (2018). Prediction is a balancing act: Importance of sampling methods to balance sensitivity and specificity of predictive models based on imbalanced chemical data sets. *Frontiers in Chemistry*, 6(8), 1–11. <https://doi.org/10.3389/fchem.2018.00362>
- Bell, E. W., & Zhang, Y. (2019). DockRMSD: An open-source tool for atom mapping and RMSD calculation of symmetric molecules through graph isomorphism. *Journal of Cheminformatics*, 11(1), 1–9. <https://doi.org/10.1186/s13321-019-0362-7>
- Benfenati, E., Q. Chaudhry, G. Gini, & J. Lou Dorne. (2019). “Integrating in silico models and read-across methods for predicting toxicity of chemicals: A step-wise strategy.” *Environ Int*, 131, p. 105060.

- Budiarto, D., Wijianto, B., & IH, H. (2023). Study of Anthocyanin Molecule Blocking as Anti-Hypertensive through the Pathway of the Renin-Angiotensin-Aldosterone System (RAAS). *Indo. J. Chem. Res.*, *11*(1), 49–58. <https://doi.org/10.30598//ijcr.2023.11-bud>
- Cahyani, F. N., Rachmawati A., Dewi U.K., Adinda S.D., & Oktavia R.A. (2021). Pengembangan dan Optimasi Kapsul Mikrosfer Ekstrak Licorice sebagai Bentuk Sediaan Oral Extended Release Kanker Payudara. *Pharmaceutical Journal Of Indonesia*, *7*(1): 63-70
- Cao, H., Pauff, J. M., & Hille, R. (2010). Substrate orientation and catalytic specificity in the action of xanthine oxidase: The sequential hydroxylation of hypoxanthine to uric acid. *Journal of Biological Chemistry*, *285*(36), 28044–28053. <https://doi.org/10.1074/jbc.M110.128561>
- Cendrianti, F., Muslichah, S., & Ulfa, E. U. (2014). Uji Aktivitas Antihiperurisemia Ekstrak n-Heksana , Etil Asetat , dan Etanol 70 % Daun Tempuyung (*Sonchus arvensis L.*) pada Mencit Jantan Hiperurisemia. *E-Jurnal Pustaka Kesehatan*, *2*(2), 205–207.
- Chan, S. L., & Labute, P. (2010). Training a scoring function for the alignment of small molecules. *Journal of Chemical Information and Modeling*, *50*(9), 1724–1735. <https://doi.org/10.1021/ci100227h>
- Chander, S., Tang, C. R., Al-Maqtari, H. M., Jamalis, J., Penta, A., Hadda, T. B., Sirat, H. M., Zheng, Y. T., & Sankaranarayanan, M. (2017). Synthesis and study of anti-HIV-1 RT activity of 5-benzoyl-4-methyl-1,3,4,5-tetrahydro2H-1,5-benzodiazepin-2-one derivatives. *Bioorganic chemistry*, *72*, 74–79. <https://doi.org/10.1016/j.bioorg.2017.03.013>
- Cos, P., Callome, M., Hu, J., Cimanga, K., Van Poel, B., & Pieters, L. (1998). Structure Activity Relationship and Classification of as Inhibitors of Xanthine Oxydase and Superoxide scavengers. *Journal of Natural Products*, *61*(1), 71-76. <https://doi.org/10.1021/np970237h>
- Choudhary, D. K., Chaturvedi, N., Singh, A., & Mishra, A. (2020). Investigation of hypoglycemic effects, oxidative stress potential and xanthine-oxidase activity of polyphenols (gallic acid, catechin) derived from faba bean on 3T3-L1 cell line: Insights into molecular docking and simulation study. *Toxicology Research*, *9*(3), 308–322. <https://doi.org/10.1093/TOXRES/TFAA025>
- 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*, 1–13.

<https://doi.org/10.1038/srep42717>

- Dana, H., Chalbatani, G. M., Gharagouzloo, E., Miri, S. R., Memari, F., Rasoolzadeh, R., & Marmari, V. (2020). In silico analysis, molecular docking, molecular dynamic, cloning, expression and purification of chimeric protein in colorectal cancer treatment. *Drug Design, Development and Therapy*, 14, 309–329. <https://doi.org/10.2147/DDDT.S231958>
- Dari, D., Andika, & Mirajunnisa. (2022). Uji Potensi Senyawa Metabolit Sekunder Tanaman Putri Malu (*Mimosa pudica L.*) Sebagai Inhibitor Xanthine Oxidase Secara In Silico. *Jurnal Ilmu Kefarmasian*, 3(2), 171–183.
- Darussalam, M., & Kartika Rukmi, D. (2019). Peran Air Rebusan Daun Salam (*Syzygium polyanthum*) Dalam Menurunkan Kadar Asam Urat. *Media Ilmu Kesehatan*, 5(2), 83–91. <https://doi.org/10.30989/mik.v5i2.149>
- Dianati N. A. (2015). Gout Dan Hiperurisemia. *Jurnal Majoroty*, 4(3), 82-89.
- Dungga, E. F. (2022). Pola Makan dan Hubungannya Terhadap Kadar Asam Urat. *Jambura Nursing Journal*, 4(1), 7–15. <https://doi.org/10.37311/jnj.v4i1.13462>
- Dwi Arjanto. (2021). 4 Manfaat Daun Salam Selain Sebagai Masakan. <https://gaya.tempo.co/read/1531370/4-manfaat-daun-salam-selain-masakan-turunkan-kadar-asam-urat-dan>. Diakses 11 November 2023
- Ekawasti, F., Sa'diah, S., Cahyaningsih, U., Dharmayanti, N. L. P. I., & Subekti, D. T. (2021). Molecular Docking Senyawa Jahe Merah dan Kunyit pada Dense Granules Protein-1Toxoplasma gondii dengan Metode In Silico. *Jurnal Veteriner*, 22(4), 474–484. <http://dx.doi.org/10.19087/jveteriner.2021.22.4.474>
- Eqlima Elfira. (2020). The Effect of Jamu on Joint Pain in Medan Sunggal, Indonesia. *Caring: Indonesian Journal of Nursing Science*, 2(2), 1–6. <https://doi.org/10.32734/ijns.v2i2.4562>
- Fajrul Harir. (2022). Docking Senyawa Heparin 2s Dan 2sns 2-12 Sakarida Konformasi Ids 4c1 Pada Kompleks Protein Fgf2-Fgfr1 Sebagai Antikanker Menggunakan Autodock. *Skripsi*. Universitas Islam Negeri Maulana Malik Ibrahim Malang.
- Hanif, A. U., Lukis, P. A., & Fadlan, A. (2020). Pengaruh Minimisasi Energi MMFF94 dengan MarvinSketch dan Open Babel PyRx pada Penambatan Molekular Turunan Oksindola Tersubstitusi. *Alchemy*, 8(2), 33–40. <https://doi.org/10.18860/al.v8i2.10481>

- Hariono, M., & Rollando. (2016). Molecular docking of compounds from *Chaetomium sp.* against human estrogen receptor alpha in searching anti breast cancer. *Jurnal Farmasi Sains dan Komunitas*, 13(1), 35–43. <https://doi.org/10.24071/jpsc.00128>
- Harismah, K. & Chusniatun, (2016). Pemanfaatan Daun Salam (*Eugenia Polyantha*) Sebagai Obat Herbal Dan Rempah Penyedap Makanan. *Warta Lpm*, 19(2), 110-118. <http://dx.doi.org/10.23917/warta.v19i2.2742>
- Harvey, R.A, & Ferrier, D.R. (2011). *Biochemistry. Edisi 5*. Lippincott Williams dan Wilkins. China.
- Herbie T. (2015). *Kitab Tanaman Berkhasiat Obat: 226 Tumbuhan Obat Untuk Penyembuhan Penyakit dan Kebugaran Tubuh*. Octopus Publishing House. Yogyakarta.
- Hermansyah, O., Salsabila, F. J., Pertiwi, R., Versita, R., & Ikhsan, I. (2022). Studi in Silico Senyawa Tumbuhan Famili Asteraceae Sebagai Penghambat Enzim Xantin Oxidase. *Pharma Xplore Jurnal Ilmiah Farmasi*, 7(2), 70–79. <https://doi.org/10.36805/jpx.v7i2.2942>
- H. K. Shin, R. Huang, & M. Chen. (2023) “In silico modeling-based new alternative methods to predict drug and herb-induced liver injury: A review.” *Food and Chemical Toxicology*, 179, p. 113948.
- Hou, Y. X., Sun, S. W., Liu, Y., Li, Y., Liu, X. H., Wang, W., & Wang, W. (2019). An improved method for the synthesis of butein using SOCl<sub>2</sub>/EtOH as catalyst and deciphering its inhibition mechanism on xanthine oxidase. *Molecules*, 24(10), 1948. <https://doi.org/10.3390/molecules24101948>
- Jennifer Lee. (2022). Administration and kinetics of drugs. MSD Manual. <https://www.msmanuals.com/en-pt/home/drugs/administration-and-kinetics-of-drugs/drug-absorption>. Diakses pada 23 Mei 2024.
- Julizan, N., Ishmayana, S., Zainuddin, A., Van Hung, P., & Kurnia, D. (2023). Potential of *Syzygium polyanthum* as Natural Food Preservative. *Foods*, 12(1), 1-24.. <https://doi.org/10.3390/foods12122275>
- Kesuma, D., Siswandono, S., Purwanto, B. T., & Hardjono, S. (2018). Uji in silico Aktivitas Sitotoksik dan Toksisitas Senyawa Turunan N-(Benzoil)-N'-feniltiourea Sebagai Calon Obat Antikanker. *JPSCR: Journal of Pharmaceutical Science and Clinical Research*, 3(1), 1-11. <https://doi.org/10.20961/jpscr.v3i1.16266>
- Klebe G. (2013). *Drug design: methodology, concepts, and mode-of-action*. Spinger. United Kingdom

- Koepsell, H. (2021). Update on drug-drug interaction at organic cation transporters: mechanisms, clinical impact, and proposal for advanced in vitro testing. *Expert Opinion On Drug Metabolism & Toxicology*, 17(6), 635–653.
- Khoirunnisa, I., & Sumiwi, S. A. (2019). Review Artikel: Peran Flavonoid Pada Berbagai Aktifitas Farmakologi. *Farmaka*, 17(2), 131–142.
- Kolina, J., Sumiwi, S. A., & Levita, J. (2019). Mode Ikatan Metabolit Sekunder Di Tanaman Akar Kuning (*Arcangelisia Flava L.*) Dengan Nitrat Oksida Sintase. *FITOFARMAKA: Jurnal Ilmiah Farmasi*, 8(1), 45–52. <https://doi.org/10.33751/jf.v8i1.1171>
- Kostić, D. A., Dimitrijević, D. S., Stojanović, G. S., Palić, I. R., Dordević, A. S., & Ickovski, J. D. (2015). Xanthine oxidase: Isolation, assays of activity, and inhibition. *Journal of Chemistry*, 1(1), 1–8. <https://doi.org/10.1155/2015/294858>
- Krihariyani, D., Haryanto, E., Sasongkowati, R., & Woelansari, E. D. (2019). Studi Insilico Aktivitas Antioksidan dan ADMET Brazilein Kayu Secang (*Caesalpinia sappan L.*) terhadap *Escherichia coli* Extended Spectrum Beta-Lactamase (ESBL). *Prosiding Seminar Nasional Kesehatan, Poltekkes Kemenkes Surabaya*. 251–257.
- Kussoy, V. F. M., Kundre, R., & Wowiling, F. (2019). Kebiasaan Makan Makanan Tinggi Purin Dengan Kadar Asam Urat Di Puskesmas. *Jurnal Keperawatan*, 7(2), 1–7. <https://doi.org/10.35790/jkp.v7i2.27476>
- Lantika, T. (2018). Gambaran Kadar Asam Urat Pada Lansia Di Panti Sosial Tresna Werdha “Teratai” Jalan Sosial Km 6 Kecamatan Sukarami Palembang Tahun 2018. *Skripsi*. Poltekkes Kemenkes Palembang.
- Lelono, R. A. A., & Tachibana, S. (2013). Bioassay-guided isolation and identification of antioxidative compounds from the bark of *Eugenia polyantha*. *Pakistan Journal of Biological Sciences*, 16(16), 812–818.
- Lestari, P. P., Kusrini, D., & Anam, K. (2014). Anthocyanin Identification of Methanol-HCl Extract Active Fraction in Rosella (*Hibiscus Sabdariffa L.*) and Its Potential as Xanthine Oxidase Inhibitor. *Jurnal Sains Dan Matematika*, 22(3), 72–78.
- Lipinski CA, Lombardo F, Dominy BW, & Feeney PJ. (2012). Experimental and computational approaches to estimate solubility and permeability in drug discovery and development settings. *Advanced Drug Delivery Reviews*. 64(Suppl.): 4-17. <http://dx.doi.org/10.1016/j.addr.2012.09.019>
- Liu, L., Zhang, L., Ren, L., & Xie, Y. (2020). Advances in structures required of

- polyphenols for xanthine oxidase inhibition. *Food Frontiers*, 1(2), 152–167.
- M. B. O. Rastini, N. K. M. Giantari, K. D. Adnyani<sup>1</sup>, & N. P. L. Laksmiani. (2019). Molecular Docking Aktivitas Antikanker Dari Quinsertin Terhadap Kanker Payudara Secara *In Silico*. *Jurnal Kimia (Journal Of Chemistry)*, 13(2), 180-184. <http://dx.doi.org/10.24843/JCHEM.2019.v13.i02.p09>
- Makatita, F. A., Wardhani, R., & Nuraini. (2020). Riset in silico dalam pengembangan sains di bidang pendidikan, studi kasus: analisis potensi cendana sebagai agen anti-aging. *Jurnal ABDI*, 2(1), 59–67.
- Mardianingrum, R., Bachtiar, K. R., Susanti, S., Aas Nuraisah, A. N., & Ruswanto, R. (2021). Studi In Silico Senyawa 1,4-Naphthalenedione-2-Ethyl-3-Hydroxy sebagai Antiinflamasi dan Antikanker Payudara. *ALCHEMY Jurnal Penelitian Kimia*, 17(1), 83-95. <https://doi.org/10.20961/alchemy.17.1.43979.83-95>
- Masoud, H. M. M., Darwish, D. A., Abdel-monsef, M. M., Helmy, M. S., Ibrahim, M. A., June, M., & June, M. (2017). Xanthine oxidase from milk of the water buffalo ( *Bubalus bubalis* ): Purification, characterization and application in SOD assay diagnostic kit. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*, 8(1735), 1735–1744.
- Mierziak, J., Kostyn, K., & Kulma, A. (2014). Flavonoids as important molecules of plant interactions with the environment. *Molecules*, 19(10), 16240–16265. <https://doi.org/10.3390/molecules191016240>
- Mirza, D. M. (2019). Studi In Silico dan In Vitro Aktivitas Antineuroinflamasi Ekstrak Etanol 96% Daun *Marsilea crenata* C. Presl. *Skripsi*. Universitas Islam Negeri Maulana Malik Ibrahim.
- Mohamed Isa, S. S. P., Ablat, A., & Mohamad, J. (2018). The antioxidant and xanthine oxidase inhibitory activity of *Plumeria rubra* flowers. *Molecules*, 23(2), 1-18. <https://doi.org/10.3390/molecules23020400>
- Morris, G. & Huey, R., (2009). AutoDock4 and AutoDockTools4: Automated Docking with selective receptor flexibility. *Journal of Molecular Biology*, 30(16), 2785–2791. <https://doi.org/10.1002%2Fjcc.21256>
- Muhammad, F., Rahmayanti, Y., & Isfanda. (2021). Potensi Fitokimia *Citrus aurantium* Dalam Menghambat Xantin Oksidase Hiperurisemia Secara In Silico. *Jurnal Health Sains*, 2(1), 79–89.
- Mulatsari, E., Martati, T., Mumpuni, E., & Dewi, N. L. (2020). In Silico Analysis of Antiviral Activity of Analog Curcumin Compounds. *Jurnal Jamu Indonesia*, 5(3), 114–121. <https://doi.org/10.29244/jji.v5i3.173>

- Muttaqin, F. Z. (2019). Molecular Docking and Molecular Dynamic Studies of Stilbene Derivative Compounds As Sirtuin-3 (Sirt3) Histone Deacetylase Inhibitor on Melanoma Skin Cancer and Their Toxicities Prediction. *Journal of Pharmacopolium*, 2(2), 112–121. <https://doi.org/10.36465/jop.v2i2.489>
- Muttaqin, F. Z., Halim, I., & Hubbi N. M. (2019). Studi Molecular Docking, Molecular Dynamic, Dan Prediksi Toksisitas Senyawa Turunan Alkaloid Naftiridin Sebagai Inhibitor Protein Kasein Kinase 2-A Pada Kanker Leukemia. *Pharmacoscript*, 2(1), 49–64. <https://doi.org/10.36423/pharmacoscript.v2i1.241>
- Naufa, F., Mutiah, R., Yen, Y., & Indrawijaya, A. (2022). Studi in Silico Potensi Senyawa Katekin Teh Hijau (*Camellia sinensis*) sebagai Antivirus SARS CoV-2 terhadap Spike Glycoprotein (6LZG) dan Main Protease (5R7Y). *Journal of Food and Pharmaceutical Sciences*, 10(1), 584-596.
- Nilamsari, N., & Fitriani, N. (2017). Faktor-faktor yang berhubungan dengan tekanan darah Pada Pekerja Shift Dan Pekerja Non Shift di PT X Gresik. *Journal of Industrial Hygiene and Occupational Health*, 2(1), 57–75.
- Noviyanti. (2015). *Hidup Sehat tanpa Asam Urat*. Edited by Ola. NOTEBOOK. Jakarta.
- Nurfadhila, L., Utami, M. R., Pratiwi, D., Qhoirul, D., Martia, E., Jana, I. I., & Lamsar, A. (2023). Potensi Senyawa Turunan Xanton dari Kulit Buah Manggis (*Garcinia mangostana L.*) Sebagai Inhibitor Protein Mycobacterium tuberculosis: Studi In Silico. *PharmaCine: Journal of Pharmacy, Medical and Health Science*, 3(2), 55–63. <https://doi.org/10.35706/pc.v3i2.7847>
- Nursanti, O., Aziz, A., & Hadisoebroto, G. (2023). Prediksi Toksisitas dan Farmakokinetika untuk mendapatkan Kandidat Obat Analgesik. *Journal of Noncommunicable Diseases*, 3(1), 34-46. <https://doi.org/10.52365/jond.v3i1.654>
- Oliveira, E. P., & Burini, R. C. (2012). High plasma uric acid oncentration: causes and consequences. diabetology and metabolic syndrome. *Diabetology & Metabolic Syndrome Journal*, 4(12), 1–7.
- Panche, A. N., Diwan, A. D., & Chandra, S. R. (2016). Flavonoids: an overview. *J. Nutr. Sci*, 5(e47), 1-15. <https://doi.org/10.1017/jns.2016.41>
- Pepki, N. (2016). Efek Ekstrak Daun Salam pada Kadar Glukosa Darah. *JK Unila*, 1, 307–309.
- Pertamawati, P., & Hardhiyuna, M. (2015). Uji Penghambatan Aktivitas Enzim

- Xantin Oksidase Terhadap Ekstrak Kulit Kayu Secang (*Caesalpinia Sappan L.*). *Kartika Jurnal Ilmiah Farmasi*, 3(2), 12–17. <https://doi.org/10.26874/kjif.v3i2.99>
- 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>
- Prahastuti, S., Tjahjani, S., & Hartini, E. (2011). Efek Infusa Daun Salam (*Syzygium polyanthum (Wight) Walp*) Terhadap Penurunan Kadar Kolesterol Total Darah Tikus Model Dislipidemia Galur Wistar. *Jurnal Medika Planta*, 1(4), 27–32.
- Pranoto. (2013). *Ikatan Hidrogen*. Universitas Brawijaya press. Malang
- Prasetiawati, R., Suherman, M., Permana, B., & Rahmawati, R. (2021). Molecular Docking Study of Anthocyanidin Compounds Against Epidermal Growth Factor Receptor (EGFR) as Anti-Lung Cancer. *Indonesian Journal of Pharmaceutical Science and Technology*, 8(1), 8–20. <https://doi.org/10.24198/ijpst.v8i1.29872>
- Prieto-Martínez, F. D., Arciniega, M., & Medina-Franco, J. L. (2018). Acoplamiento Molecular: Avances Recientes y Retos. *TIP Revista Especializada En Ciencias Químico-Biológicas*, 21(3), 65–87. <https://doi.org/10.22201/fesz.23958723e.2018.0.143>
- Putra, I. A., Erly, E., & Masri, M. (2015). Uji Efek Antibakteri Ekstrak Etanol Kulit Batang Salam {*Syzygium polyanthum (Wight) Walp*} terhadap *Staphylococcus aureus* dan *Escherichia coli* secara Invitro. *Jurnal Kesehatan Andalas*, 4(2), 497–501. <https://doi.org/10.25077/jka.v4i2.281>
- Res, I. J. C., Potensi, S., Tersubstitusi, P., Tiosemikarbazon, D., Kilo, A. La, Aman, L. O., & Kilo, J. La. (2019). Studi potensi prazolin tersubstitusi 1-N dari tiosemikarbazon sebagai agen antiamuba melalui uji insilico. *Indonesian Journal of Chemistry*, 7(1), 9–16.
- Rohmat, M. L. H., & Herdyastuti, N. (2021). Article Review: Isolation and Measurement of Xanthine Oxidase Enzyme Activities. *UNESA Journal of Chemistry*, 10(1), 96–108.
- Rosita, A. P. (2019). Molekular Docking Dengan Metode Molegro Virtual Docker Turunan Kalkon Sebagai Antimikroba. *STOMATOGNATIC-Jurnal Kedokteran Gigi*, 9(1), 39–47.
- Sagita, L., Glorina, E. M., & Siswanto, S. (2021). Karakteristik Flavonoid dari

- Daun Kitolod dengan Proses Maserasi dan Enkapsulasi. *ChemPro*, 2(2), 44–51. <https://doi.org/10.33005/chempro.v2i02.103>
- Samsu, N. (2021). Diabetic Nephropathy: Challenges in Pathogenesis, Diagnosis, and Treatment. *BioMed Research International*, 2021: 1497449. <https://doi.org/10.1155/2021/1497449>
- Sari, I. W., Junaidin, & Pratiwi, D. (2020). I Studi Molecular Docking Senyawa Flavonoid Herba Kumis Kucing (*Orthosiphon stamineus B.*) Pada Reseptor A-Glukosidase Sebagai Antidiabetes Tipe 2. *Jurnal Farmagazine*, 7(2), 54–60.
- Shah, K., Mujwar, S., Gupta, J. K., Shrivastava, S. K., & Mishra, P. (2019). Molecular Docking and In Silico Cogitation Validate Mefenamic Acid Prodrugs as Human Cyclooxygenase-2 Inhibitor. *Assay and drug development technologies*, 17(6), 285–291.
- Shargel L & Yu A. (2016). *Applied Biopharmaceutics and Pharmacokinetics*. 7th ed. New York: McGraw Hill
- Shihab, M. Quraish. (2002). *Tafsir al-Misbah; Pesan, Kesan, dan Keserasian Alquran Vol. 5*. Jakarta: Lentera Hati.
- Silalahi, M. (2017). *Syzygium polyanthum* (Botani, Metabolit Sekunder dan Pemanfaatan). *Jurnal Dinamika Pendidikan*, 10(1), 1–16.
- Siswandono. (2016). *Kimia Medisinal II (Kedua)*. Universitas Airlangga Press. Surabaya.
- Smith DA, Beaumont K, Maurer TS, & Di L. (2015). Volume of Distribution in Drug Design. *J Med Chem*, 58(15), 5691-5698.
- Suhadi, A., Rizarullah, R., & Feriyani, F. (2019). Simulasi Docking Senyawa Aktif Daun Binahong Sebagai Inhibitor Enzyme Aldose Reductase. *Sel Jurnal Penelitian Kesehatan*, 6(2), 55–65. <https://doi.org/10.22435/sel.v6i2.1651>
- Suherlan, S., Rohayah, R., & Fakih, T. M. (2021). Uji Aktivitas Antikanker Payudara Senyawa Andrografolida Dari Tumbuhan Sambiloto (*Andrographis Paniculata (Burm F) Ness.*) Terhadap Human Epidermal Growth Factor Receptor 2 (Her-2) Secara In Silico. *Jurnal Ilmiah Farmasi Farmasyifa*, 4(2), 39–50. <https://doi.org/10.29313/jiff.v4i2.7784>
- Takahama, U., Koga, Y., Hirota, S., & Yamauchi, R. (2011). Inhibition of xanthine oxidase activity by an oxathiolanone derivative of quercetin. *Food Chemistry*, 126(4), 1808–1811.

- Thahara, C.A., Rizarullah, Ratih A.A., & Abdul W. (2022). Potensi Pendekatan in Silico Sebagai Penghambat Aktivitas Protein Protease Utama SARS-CoV-2 dari Tiga Senyawa Tanaman Obat Jahe Merah. *JUPI (Jurnal IPA dan Pembelajaran IPA)*, 6(3), 207-218.
- Varma, A. K., Patil, R., Das, S., Stanley, A., Yadav, L., & Sudhakar, A. (2010). Optimized hydrophobic interactions and hydrogen bonding at the target-ligand interface leads the pathways of Drug-Designing. *PLoS ONE*, 5(8), 1-10. <https://doi.org/10.1371/journal.pone.0012029>
- 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.
- Widiyanti, H., Charles, B., & Morina, A. (2021). Analisis Hubungan Kuantitatif Struktur Terhadap Aktivitas Turunan Senyawa Cubebin Sebagai Antikanker Dengan Metode Recife Model 1 (Rm1). *Bencoolen Journal of Pharmacy*, 1 (1), 46-58.
- Widiyono, W. (2020). Pengaruh Rebusan Daun Salam Terhadap Penurunan Kadar Asam Urat Pada Lansia. *Jurnal Perawat Indonesia*, 4(2), 413–423. <https://doi.org/10.32584/jpi.v4i2.594>
- Widodo., Utomo, D., Ramadhani, A., Hasanah, A., & Fitriah, A. (2018). *Cara Mudah Melakukan Docking Dengan PyRx(1)*. Global Science. Malang.
- Widyawati, T., Yusoff, N. A., Asmawi, M. Z., & Ahmad, M. (2015). Antihyperglycemic effect of methanol extract of *Syzygium polyanthum* (Wight.) leaf in streptozotocin-induced diabetic rats. *Nutrients*, 7(9), 7764–7780. <https://doi.org/10.3390/nu7095365>
- Xue, H., Xu, M., Gong, D., & Zhang, G. (2023). Mechanism of flavonoids inhibiting xanthine oxidase and alleviating hyperuricemia from structure–activity relationship and animal experiments: A review. *Food Frontiers*, 4(4),
- Ya’u Ibrahim, Z., Uzairu, A., Shallangwa, G., & Abechi, S. (2020). Molecular docking studies, drug-likeness and in-silico ADMET prediction of some novel  $\beta$ -Amino alcohol grafted 1,4,5-trisubstituted 1,2,3-triazoles derivatives as elevators of p53 protein levels. *Scientific African*, 10, e00570.
- Zubair, M. S., Maulana, S., & Mukaddas, A. (2020). Penambatan Molekuler dan Simulasi Dinamika Molekuler Senyawa Dari Genus *Nigella* Terhadap Penghambatan Aktivitas Enzim Protease HIV-1. *Jurnal Farmasi Galenika (Galenika Journal of Pharmacy) (e-Journal)*, 6(1), 132–140.