



## DAFTAR PUSTAKA

- Abdurrahman, R., 2018, Sintesis Analog Kurkumin Mono-Keton Berbahan Dasar 4-benziloksi-3-metoksibenzaldehida dan Uji Aktivitasnya Sebagai Inhibitor Enzim Alfa-Amilase, *Skripsi*, Departemen Kimia FMIPA Universitas Gadjah Mada, Yogyakarta.
- Adelina, R., 2014, Uji Molecular Docking *Annomuricin E* dan *Muricapentocin* pada Aktivitas Antiproliferasi, *Jurnal Ilmu Kefarmasian Indonesia*, 12(1), 32-36.
- Afrina, M., 2022, Narrative Review: Bioavailabilitas Analog Kurkumin Monokarbonil Serta Potensinya Sebagai Kemopreventif, *Disertasi*, Fakultas Farmasi Universitas Gadjah Mada, Yogyakarta.
- Ambarwati, W. N., dan Wardani, E. K., 2014, Efek Samping Kemoterapi Secara Fisik Pasien Penderita Kanker Servik, *Jurnal Prosiding Seminar Nasional & Internasional UNIMUS*, 2(2), 97-106.
- Ananda, D. A. T., 2021, Uji In-Silico Senyawa Sesquiterpene Lactone *Tithonia Diversifolia* Terhadap Reseptor p53 Sebagai Agen Terapi Kanker Serviks, *Disertasi*, UIN Sunan Gunung Djati, Bandung.
- Anderson, M., dan Omri, A., 2004, The Effect of Different Lipid Components on The In Vitro Stability and Release Kinetics of Liposome Formulations, *Drug Deliv.*, 11(1), 33-39.
- Anisa, D. N., Utami, G. N., dan Hidayat, D., 2022, Sintesis Senyawa Analog Kurkumin Monoketon dengan Variasi Konsentrasi Katalis KOH, *Analit: Analytical and Environmental Chemistry*, 7(1), 13-20.
- Anonim, 2019, Bagaimana HPV di DIY?, URL: <https://dinkes.jogjaprov.go.id/>, Diakses tanggal 13 Februari 2023.
- Anonim, 2021a, *Indonesia (Globocan)*, URL: <https://gco.iarc.fr/today/data/factsheets/populations/360-indonesia-factsheets.pdf>, Diakses tanggal 21 Juli 2023.
- Anonim, 2021b, *Indonesia Cervical Cancer Profile (WHO)*, URL: [https://cdn.who.int/media/docs/default-source/country-profiles/cervical-cancer/cervical-cancer-idn-2021-country-profile-en.pdf?sfvrsn=57921e8c\\_38&download=true](https://cdn.who.int/media/docs/default-source/country-profiles/cervical-cancer/cervical-cancer-idn-2021-country-profile-en.pdf?sfvrsn=57921e8c_38&download=true), Diakses tanggal 21 Juli 2023.
- Baldwin, P. R., Reeves, A. Z., Powell, K. R., Napier, R. J., Swimm, A. I., Sun, A., Giesler, K., Bommarius, B., Shinnick, T. M., Snyder, J. P., Liotta, D. C., dan Kalman, D., 2015, Monocarbonyl Analogs of Curcumin Inhibit Growth Of Antibiotic Sensitive and Resistant Strains of Mycobacterium Tuberculosis, *Eur. J. Med. Chem.*, 92, 693-699.
- Barwick, V., Langley, J., Mallet, T., Stein, B., dan Webb, K., 2006, *Best Practice Guide for Generating Mass Spectra*, LGC Limited, Lystrup.
- Bertus, M. Y. P., Suherman, S., dan Sabang, S. M., 2014, Karakterisasi FTIR Poliblend Adsorben Serbuk Biji Buah Kelor (*Moringa oleifera*) dan Cangkang Ayam Ras Untuk Pengolahan Air Gambut di Daerah Palu Barat, *J. Akad. Kim.*, 3(1), 21-29.
- Bruncko, M., Oost, T. K., Belli, B. A., Ding, H., Joseph, M. K., Kunzer, A., Oltersdorf, T., Wendt, M. D., Martineau, D., Park, C., Zhang, H., dan Elmore, S. W., 2007, Studies Leading to Potent, Dual Inhibitors of Bcl-2 and Bcl-xL, *J. Med. Chem.*, 50(4), 641-662.



- Bukhari, S. N. A., Jantan, I. B., Jasamai, M., Ahmad, W., dan Amjad, M. W. B., 2013, Synthesis and Biological Evaluation of Curcumin Analogues, *J. Med. Sci.*, 13(7), 501-513.
- Burdall, S.E., Hanby, A.M., Lansdown, M.R.J. dan Speirs, V., 2003, Breast Cancer Cell Lines: Friend or Foe?, *Breast Cancer Res.*, 5(2).
- Chiaia-Hernandez, A. C., Schymanski, E. L., Kumar, P., Singer, H. P., dan Hollender, J., 2014, Suspect and Nontarget Screening Approaches to Identify Organic Contaminant Records in Lake Sediments, *Anal. Bioanal. Chem.*, 406, 7323-7335.
- Choodamani, B., Kumar, S., Gupta, A.K., Schols, D., Tahtaci, H., Karakurt, T., Kotha, S., Swapna, B., Setty, R., dan Karki, S.S., 2021, Synthesis, Molecular Docking, And Preliminary Cytotoxicity Study of Some Novel 2-(naphthalene-1-yl)-methylimidazo [2, 1-b][1, 3, 4] Thiadiazoles, *J. Mol. Struct.*, 1234.
- Da'i, M., 2022, Eksplorasi Agen Kemoterapi Non Toksik: Kajian Terhadap Riset Kurkumin, Turunan dan Analog Kurkumin, serta Senyawa Lain Bersumber dari Tanaman, *Orasi Ilmiah*, 7 Desember 2019, Surakarta.
- Dachriyanus, D., Yanwirasti, Y., Wahyuni, F. S., Fadhli, H., dan Aswan, P. A., 2018, Aktivitas Sitotoksik Ekstrak Etil Asetat Daun Tampa Badak (*Voacanga foetida* (Bl.) K. Schum) Pada Kanker Kolon HTB-38, *J. Sains Farm. Klin.*, 5(2), 142-146.
- Damayanti, S., Khonsa, K., dan Amelia, T., 2021, Antiviral Activity and Toxicity Prediction of Compounds Contained in Figs (*Ficus Carica L.*) by In Silico Method, *IJPST*, 8(1), 21-33.
- Dasari, S. dan Tchounwou, P. B., 2014, Cisplatin in Cancer Therapy: Molecular Mechanisms of Action, *Eur. J. Pharmacol.*, 740, 364–378.
- Dhanasekaran, S., 2019, Augmented Cytotoxic Effects of Paclitaxel by Curcumin Induced Overexpression of Folate Receptor-A for Enhanced Targeted Drug Delivery in HeLa Cells, *Phytomedicine*, 56, 279-285.
- Dharma, G. K. A., Lestari, D. P. O., Armerinayanti, N. W., dan Sari, N. L. P. E. K., 2021, Prevalensi Ekspresi Epidermal Growth Factor Receptor (EGFR) pada Karsinoma Penis. *AMJ: Aesculapius Medical Journal*, 1(1), 38-44.
- Dua, J. S., Rana, A. C., dan Bhandari, A. K., 2012, Liposome: Methods of Preparation and Applications, *Int. J. Pharm. Stud. Res.*, 3(2), 14-20.
- Dwiastuti, R., Noegrohati, S., Istyastono, E.P. dan Marchaban, M. 2016. Metode Pemanasan Dan Sonikasi Menghasilkan Nanoliposom dari Fosfolipid Lesitin Kedelai (*Soy Lecithin*). *J. Farm. Sains Kom.*, 13(1), 23-27.
- Efiana, N. A., dan Yuwono, T., 2013, Liposom Formulation As A Thymoquinon Nano-Carrier to Increased The Anticancer Activity, *Proceeding of International Safety Management of Central Cytotoxic Reconstitution*, 25 Mei 2013, Yogyakarta,.
- Evriarti, P. R., dan Yasmon, A., 2019, Patogenesis Human Papillomavirus (HPV) pada Kanker Serviks, *Jurnal Biotek Medisiana Indonesia*, 8(1), 23-32.
- Febriyenti, F., Putra, D.P., Wicaksanti, E.I., dan Hamami, C.D., 2018, Formulasi liposom ekstrak terpurifikasi *Centella asiatica* menggunakan fosfatidilkolin dan kolesterol, *J. Sains Farm. Klin.*, 5(2),78-82.



- Geran, R.I., Greenberg, N.H., Macdonald, M.M., Shumacher, A.M., dan Abbott, B.J., 1972, Protocols for Screening Chemical Agents and Natural Products Against Animal Tumors and Other Biological Systems, *Cancer Chemother. Rep.*, 3, 17-27.
- Giordano, A., dan Tommonaro, G., 2019, Curcumin and Cancer, *Nutrients*, 11(10), 2376.
- Girija, C. R., Karunakar, P., Poojari, C. S., Begum, N. S., dan Syed, A. A., 2010, Molecular Docking Studies Of Curcumin Derivatives With Multiple Protein Targets For Procarcinogen Activating Enzyme Inhibition, *Journal of Proteom. Bioinform.*, 3(6), 200-203.
- Guedes, I. A., de Magalhães, C. S., dan Dardenne, L. E., 2014, Receptor-ligand Molecular Docking, *Biophys. Rev.*, 6(1), 75-87.
- Hafshah, M., dan Karlina, L., 2019, Desain Turunan Kalkon Baru Sebagai Antikanker Payudara Berdasarkan Molecular Docking, *Walisongo J. Chem.*, 2(2), 57-63.
- Hapsari, N., 2018, Sintesis Analog Kurkumin Monoketon Berbahan Dasar Turunan Benzaldehida dengan Aseton dan Uji In Vitro Antikanker Terhadap Sel Kanker Payudara (T47D) dan Serviks (HeLa), *Disertasi*, Departemen Kimia FMIPA Universitas Gadjah Mada, Yogyakarta.
- Hasnani, F., 2022, Hidup dengan Kanker Serviks, *Syntax Lit.*, 7(3), 1141-1160.
- Hazekawa, M., Nishinakagawa, T., Kawakubo-Yasukochi, T., dan Nakashima, M., 2019, Evaluation of IC<sub>50</sub> Levels Immediately After Treatment With Anticancer Reagents Using A Real-Time Cell Monitoring Device, *Exp. Ther. Med.*, 18(4), 3197-3205.
- Huwaida, F. I., 2018, Profiling Aktivitas dan Toksisitas Antikanker Ekstrak Bawang Dayak (*Eleutherine palmifolia L.*) dari Beberapa Lokasi di Indonesia Terhadap Sel Kanker Kolon WiDr dan Sel Normal (*Vero Cell Line*), *Disertasi*, Farmasi FKIK Universitas Islam Negeri Maulana Malik Ibrahim, Malang.
- Jain, A.N., dan Nicholls, A., 2008, Recommendation for Evaluation of Computational Methods, *J. Comput. Aided Mol. Des.*, 22(3), 133-139.
- Jalil, A. Wert, J. Farooq, A. dan Ahmad, S., 2021, *Overcoming Drug Resistance in Cervical Cancer: Chemosensitizing Agents and Targeted Therapies*, Academic Press, Cambridge.
- Jamal, M. S., Parveen, S., Beg, M. A., Suhail, M., Chaudhary, A. G., Damanhoury, G. A., Abuzenadah, A. M., dan Rehan, M., 2014, Anticancer Compound Plumbagin and Its Molecular Targets: A Structural Insight Into The Inhibitory Mechanisms Using Computational Approaches. *PloS one*, 9(2), e87309.
- Jayanti, A. T., 2018, Sintesis Analog Kurkumin Monoketon Berbahan Dasar Para-Dimetilaminobenzaldehida dan Uji Aktivitasnya Sebagai Inhibitor Enzim Alfa-Amilase, *Skripsi*, Departemen Kimia FMIPA Universitas Gadjah Mada, Yogyakarta.
- Julianus, J., dan Luckyvano, E., 2014, Sintesis Asam Sinamat dari Benzaldehida dan Asam Malonat dengan Katalis Dietilamina, *J. Pharm. Sci. Community*, 11(1), 1-6.
- Kastritis, P.L., dan Bonvin, A.M.J.J., 2012, On the Binding Affinity of Macromolecular Interactions: Daring to Ask Why Proteins Interact, *J. R. Soc.*, 10(79), 1-27.



- Khan, S. U., Ullah, F., Mehmood, S., Fahad, S., Ahmad Rahi, A., Althobaiti, F., Dessokey, A. S., Saud, S., Danish, S., dan Datta, R., 2021), Antimicrobial, Antioxidant and Cytotoxic Properties of *Chenopodium glaucum L.*, *PLoS One*, 16(10), e0255502.
- Kumar, P., Nagarajan, A., dan Uchil, P. D., 2018, Analysis of Cell Viability by the MTT Assay, *Cold Spring Harb. Protoc.*, 2018(6), 469-471.
- Kurniawan, C., Siagian, J. W., dan Hutomo, S., 2016, Sitotoksitas Ekstrak Etanolik *Curcuma longa* Pada Sel Hela, Studi In Vitro, *Berk. Ilm. Kedokt. Duta Wacana*, 1(3), 165.
- Laksmani, N. P. L., Astuti, N. M. W., Arisanti, C. I. S., dan Paramita, N. L. P. V., 2018, December). Ethyl Acetate Fraction Of Secang As Anti Cervical Cancer By Inducing p53 and Caspase 9, *IOP Conference Series: Earth and Environmental Science*, Desember 2018.
- Landry, J. J. M., Pyl, P. T., Rausch, T., Zichner, T., Tekkedil, M.M., Stütz, A.M., Jauch, A., Aiyar, R.S., Pau, G., Delhomme, N., Gagneur, J., Korbel, J.O., Huber, W. dan Steinmetz, L.M., 2013, The Genomic and Transcriptomic Landscape of a Hela Cell Line. *G3-Genes Genom Genet.*, 3, 1213-1224.
- Leisching, G., Loos, B., Botha, M., dan Engelbrecht, A. M., 2015, Bcl-2 Confers Survival in Cisplatin Treated Cervical Cancer Cells: Circumventing Cisplatin Dose-Dependent Toxicity and Resistance, *J.Transl. Med.*, 13(1), 1-8.
- Li, H. Q., Yang, J., Ma, S., dan Qiao, C., 2012, Structure-based Design of Rhodanine-Based Acylsulfonamide Derivatives As Antagonists of The Anti-Apoptotic Bcl-2 Protein, *Bioorg. Med. Chem.*, 20(14), 4194-4200.
- Li, H., Lu, Y., Pang, Y., Li, M., Cheng, X., dan Chen, J., 2017, Propofol Enhances The Cisplatin-Induced Apoptosis on Cervical Cancer Cells Via EGFR/JAK2/STAT3 Pathway, *Biomed. Pharmacother.*, 86, 324-333.
- Ma, Z., Wang, N., He, H., dan Tang, X., 2019, Pharmaceutical Strategies of Improving Oral Systemic Bioavailability of Curcumin For Clinical Application, *J. Control. Release*, 316, 359-380.
- Manohar, S., dan Leung, N., 2018, Cisplatin Nephrotoxicity: A Review of The Literature. *J. Nephrol.*, 31(1), 15-25.
- Mardianis, Y., Anwar, C., dan Haryadi, W. (2017). Sintesis Analog Kurkumin Monoketon Berbahan Dasar Sinamaldehida dan Uji Aktivitasnya Sebagai Inhibitor Enzim A-Glukosidase, *J. Sains Dasar*, 6(2), 123-132.
- Marleen, F. S., Syahruddin, E., Hudoyo, A., Endarjo, S., Hidayat, H., dan Suzanna, E., 2009, Ekspresi Protein Bcl-2 Pada Sediaan Blok Parafin Jaringan Kanker Paru, *J. Respirol. Indones.*, 29(4), 1-14.
- Masters, J. R., 2002, HeLa Cells 50 Years On: The Good, The Bad and The Ugly, *Nat. Rev. Cancer*, 2(4), 315-319.
- Mohankumar, K., Pajaniradje, S., Sridharan, S., Singh, V. K., Ronsard, L., Banerjea, A. C., Selvanesan, B. C., Coumar, M. S., Periyasamy, L., dan Rajagopalan, R., 2014, Apoptosis Induction by An Analog of Curcumin (BDMC-A) In Human Laryngeal Carcinoma Cells Through Intrinsic and Extrinsic Pathways, *Cell. Oncol.*, 37, 439-454.
- Morgan, E. Scarth, J. Patterson, M. Wasson, C. Hemingway, G. Barba-Moreno, D., dan Macdonald, A., 2020, E6-mediated Activation of JNK Drives EGFR



- Signalling to Promote Proliferation and Viral Oncoprotein Expression in Cervical Cancer, *Cell Death Differ.*, 28(5), 1669-1687.
- Mphahlele, M. J., Mmonwa, M. M., Aro, A., McGaw, L. J., dan Choong, Y. S., 2018, Synthesis, Biological Evaluation and Molecular Docking of Novel Indole-Aminoquinazoline Hybrids For Anticancer Properties, *Int. J. Mol. Sci.*, 19(8), 2232.
- Mustika, C. R.. 2022, Penambatan Molekuler, Sintesis dan Aktivitas Antimalaria Analog Kurkumin Monoketon Berbahan Dasar 2-Klorobenzaldehida, *Tesis*, Departemen Kimia FMIPA Universitas Gadjah Mada, Yogyakarta.
- Nabati, F., Moradi, M., dan Mohabatkar, H., 2020, In Silico Analyzing The Molecular Interactions of Plant-Derived Inhibitors Against E6AP, p53, and c-Myc Binding Sites of HPV Type 16 E6 Oncoprotein, *Mol. Biol. Res. Commun.s*, 9(2), 71.
- Nauli, T., 2014, Penentuan Sisi Aktif Selulase *Aspergillus niger* dengan Docking Ligan, *J. Kim. Terap. Indones.*, 16(2), 94-100.
- Nishimura, Y., Ezawa, R., Ishii, J., Ogino, C., dan Kondo, A., 2017, Affibody-displaying Bio-Nanocapsules Effective In EGFR, Typical Biomarker, Expressed In Various Cancer Cells, *Bioorg. Med. Chem. Lett.*, 27(2), 336-341.
- Noor, N. A., 2008, Formulasi Baru Liposom Tetraeter Lipid (EPC-TEL 2,5) Hasil Sonikasi dan Stabilitasnya Dalam Larutan NaCl dan MgCl<sub>2</sub> 150 mOsm pH 7, *Skripsi*, Fakultas Kedokteran Universitas Indonesia, Depok.
- Noureddin, S. A., El-Shishtawy, R. M., dan Al-Footy, K. O., 2019, Curcumin Analogues and Their Hybrid Molecules as Multifunctional Drugs, *Eur. J. Med. Chem.*, 182, 111631.
- Nurani, L. H., 2011, Uji Sitotoksitas dan Antiproliferatif Fraksi Etil Asetat Ekstrak Etanol Biji Jinten Hitam (*Nigella sativa, Lour*) Terhadap Sel Mieloma, *Jurnal Ilmiah Kefarmasian*, 1(2), 11-21.
- Pagadala, N. S., Syed, K., dan Tuszyński, J., 2017, Software For Molecular Docking: A Review, *Biophys. Rev.*, 9(2), 91-102.
- Pal, A., dan Kundu, R., 2020, Human Papilomavirus E6 and E7: The Cervical Cancer Hallmarks and Target of The Therapy, *Front. Microbial.*, 9, 3116.
- Pan-On, S., Dilokthornsakul, P., dan Tiyaboonchai, W., 2022, Trends in Advanced Oral Drug Delivery System For Curcumin: A Systematic Review, *J. Control. Release*, 348, 335-345.
- Parashar, G., Parashar, N. C., dan Capalash, N., 2012, Curcumin Causes Promoter Hypomethylation and Increased Expression of FANCF Gene in SiHa Cell Line, *Mol. Cell. Biochem.*, 365, 29-35.
- Paulraj, F., Abas, F., Lajis, N. H., Othman, I., Syed Hassan, S., dan Naidu, R., 2015, The Curcumin Analogue 1, 5-bis (2-hydroxyphenyl)-1, 4-pentadiene-3-one Induces Apoptosis And Downregulates E6 and E7 Oncogene Expression in HPV16 and HPV18-infected Cervical Cancer Cells, *Molecules*, 20(7), 11830-11860.
- Pebriana, R. B., Romadhon, A. F., Yunianto, A., Rokhman, M. R., Fitriyah, N. Q., Jenie, R. I., dan Meiyanto, E., 2012, Docking Kurkumin dan Senyawa Analognya Pada Reseptor Progesteron: Studi Interaksinya Sebagai Selective Progesterone Receptor Modulators (SPRMs), *Pharmacon*, 13(2), 55-60.



- Permatasari, H. K., Kusuma, I. D., dan Mayangsari, E., 2019, Minyak Cengkeh (*Syzygium aromaticum*) menginduksi apoptosis pada sel kanker servik HeLa melalui peningkatan kadar protein p53, *J. Kedokter.Brawijaya*, 30(3), 185-190.
- Peschka, R., Dennehy, C., dan Szoka Jr, F. C., 1998, A Simple In Vitro Model To Study The Release Kinetics of Liposome Encapsulated Material, *J. Control. Release*, 56(1-3), 41-51.
- Porté, S., Valencia, E., Yakovtseva, E. A., Borras, E., Shafqat, N., Debreczeny, J. É., Pike, A C. W., Oppermann, U., Farres, J., Fita, I., dan Pares, X., 2009, Three-dimensional Structure and Enzymatic Function Of Proapoptotic Human p53-inducible Quinone Oxidoreductase PIG3, *J. Biol. Chem.*, 284(25), 17194-17205.
- Prasad, S., Tyagi, A. K., dan Aggarwal, B. B., 2014). Recent Developments in Delivery, Bioavailability, Absorption and Metabolism of Curcumin: The Golden Pigment From Golden Spice, *Cancer Res. Treat.*, 46(1), 2-18.
- Prasetyaningrum, W. P., Bahtiar, A., dan Hayun, H., 2018, Synthesis and Cytotoxicity Evaluation of Novel Asymmetrical Mono-Carbonyl Analogs of Curcumin (AMACs) Against Vero, HeLa, and MCF7 Cell Lines, *Sci. Pharm.*, 86(2), 1-13.
- Prayong, P., Barusrux, S. and Weerapreeyakul, N., 2008, Cytotoxic Activity Screening of Some Indigenous Thai Plants, *Fitoterapia*, 79(7-8), 598-601.
- Priyadarsini, K. I., 2013, Chemical and Structural Features Influencing The Biological Activity of Curcumin, *Curr. Pharm. Des.*, 19(11), 2093-2100.
- Pulido-Moran, M., Moreno-Fernandez, J., Ramirez-Tortosa, C., dan Ramirez-Tortosa, M., 2016, Curcumin and Health., *Molecules*, 21(3), 264 (1-22).
- Purnama, E., dan Budimarwanti, C., 2018, Sintesis Asam Sitronelat Melalui Reaksi Oksidasi Sitronelal Menggunakan Oksidator Asam Kromat dengan Katalis Transfer Fasa Tween 20, *Jurnal Elemen Kimia*, 7(1), 29-36.
- Puspitaningrum, E., 2020, Rasio Prevalensi Paritas Terhadap Kejadian Kanker Serviks di Kota Yogyakarta, *Skripsi*, Poltekkes Kemenkes Yogyakarta, Yogyakarta.
- Putri, A.R., Khaerunnisa, S., dan Yuliati, I., 2019, Cervical Cancer Risk Factors Association in Patients at The Gynecologic-Oncology Clinic of Dr. Soetomo Hospital Surabaya, *Indonesian Journal of Cancer*, 13(4), 104–109.
- Putri, D. C. A., 2016, Pengaruh Suhu dan Lama Sonikasi pada Pembuatan Liposom dengan Kurkumin, *Tesis*, Fakultas Farmasi Universitas Gadjah Mada, Yogyakarta.
- Putri, F. Y., Riza, H., dan Fajriaty, I., 2019, Studi Molecular Docking Hasil Modifikasi Struktur Senyawa Atorvastatin untuk Meningkatkan Efek Antihiperlipidemia, *Jurnal Mahasiswa Farmasi Fakultas Kedokteran UNTAN*, 4(1).
- Rabima, R., 2018, Characterization & Antibacterial Activity of Curcumin-Nanostructured Lipid Carrier, *Indonesia Natural Research Pharmaceutical Journal*, 3(2), 1-10.
- Ramadon, D. dan Mun'im, A., 2017, Pemanfaatan Nanoteknologi Dalam Sistem Penghantaran Obat Baru Untuk Produk Bahan Alam, *Jurnal ilmu kefarmasian Indonesia*, 14(2), 118-127.



- Ramadon, D. dan Mun'im, A., 2016, Pemanfaatan Nanoteknologi Dalam Sistem Penghantaran Obat Baru Untuk Produk Bahan Alam, *Jurnal Ilmu Kefarmasian*, 4(2), 118-127.
- Rastini, M.B.O., Giantari, N.K.M., Adnyani, K.D., dan Laksmiani, N.P.L., 2019, Molecular Docking Aktivitas Antikanker Dari Kuersetin Terhadap Kanker Payudara Secara In Silico, *J. Chem.*, 13(2), 180-184.
- Rihhadatulaisy, S., Sriwidodo, S., dan Putriana, N. A., 2020, Stabilisasi Liposom dalam Sistem Penghantaran Obat, *Majalah Farmasetika*, 5(5), 257-272.
- Riki, R., 2017, Potensi Antikanker Nanopartikel Ekstrak Kurkuminoid Temulawak Terhadap Sel Line Kanker Serviks, *INRPJ*, 2(1).
- Salim, M., Susanto, A., dan Stefanus, D., 2014, Terapi Nanopartikel Albumin-Kurkumin Atasi Kanker Payudara Multidrug Resistant, *CDK*, 41(9), 707-709.
- Sari, I. W., Junaidin, J., dan Pratiwi, D., 2020, 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.
- Sastrohamidjojo, H., 2018, *Dasar-dasar Spektroskopi*, UGM Press, Sleman.
- Sekarini, A. A. A. D., Krissanti, I., dan Syamsunarno, M. R. A., 2020, Efektivitas Antibakteri Senyawa Kurkumin Terhadap Foodborne Bacteria: Tinjauan Curcuma Longa Untuk Mengatasi Resistensi Antibiotik, *J. Sains Kesehat.*, 2(4), 538-547.
- Shofi, M., 2021, Analisis Senyawa  $\alpha$ -spinasterol Pada Biji Trembesi (Samanea saman (jacq.) Merr) Terhadap Penghambatan 3C-like Protease SARS-CoV-2 Melalui Uji In Silico, *J. Sintesis*, 2(2), 74-88.
- Stamos, J., Sliwkowski, M. X., dan Eigenbrot, C., 2002, Structure of the epidermal growth factor receptor kinase domain alone and in complex with a 4-anilinoquinazoline inhibitor, *J. Biol. Chem.*, 277(48), 46265-46272.
- Stockert, J. C., Horobin, R. W., Colombo, L. L., dan Blázquez-Castro, A., 2018, Tetrazolium Salts and Formazan Products in Cell Biology: Viability Assessment, Fluorescence Imaging, and Labeling Perspectives, *Acta Histochem.*, 120(3), 159-167.
- Sufi, S. A., Adigopula, L. N., Syed, S. B., Mukherjee, V., Coumar, M. S., Rao, H. S. P., dan Rajagopalan, R., 2017, In-silico and in-vitro anti-cancer potential of a curcumin analogue (1E, 6E)-1, 7-di (1H-indol-3-yl) hepta-1, 6-diene-3, 5-dione, *Biomed. Pharmacother.*, 85, 389-398.
- Sulistyani, M., 2018, Spektroskopi Fourier Transform Infra Red Metode Reflektansi (Atr-Ftir) Pada Optimasi Pengukuran Spektrum Vibrasi Vitamin C, *Jurnal Temapela*, 1(2), 39-43.
- Suma, A. A. T., 2019, Sintesis, Uji Sitotoksitas dan Uji Imunositokimia Turunan N-Fenilpirazolina dari 4-Kloroasetofenon sebagai Senyawa Antikanker, *Disertasi*, Departemen Kimia FMIPA, Universitas Gadjah Mada, Yogyakarta.
- Susianti, S., 2012, Pengaruh Ekstrak Kloroform Umbi Rumput Teki (*Cyperus rotundus L.*) Terhadap Ekspresi Protein Bcl-2 Pada Sel Hela, *Jurnal Sains MIPA Universitas Lampung*, 8(1), 1-7.
- Susilawati, D., 2014, Hubungan Antara Dukungan Keluarga Dengan Tingkat Kecemasan Penderita Kanker Serviks Paliatif, *Jurnal keperawatan*, 5(1), 1-15.



- Susilowati, D. dan Nopiyanti, V., 2014, Penelusuran Isolat Bioaktif Ekstrak Umbi Sarang Semut Terhadap Kanker Servik (Sel HeLa), *Biomedika*, 7(1), 13-18.
- Tang, M., Yu, X., Jiang, Y., Shi, Y., Liu, X., Li, W., dan Cao, Y., 2014, Common Methods Used for the Discovery of Natural Anticancer Compounds, *Cancer Prevention: Dietary Factors and Pharmacology*, 33-52.
- Tedjo, A., Noor, D., dan Heryanto, R., 2021, Potensi Curcumin dan 4 Herbal Empon-Empon Dalam Memodulasi Kekebalan Sel T Terhadap Covid-19. *Herb-Medicine Journal*, 4(3), 72-81.
- Velázquez-Libera, J. L., Durán-Verdugo, F., Valdés-Jiménez, A., Núñez-Vivanco, G., dan Caballero, J., 2020, LigRMSD: A Web Server For Automatic Structure Matching and RMSD Calculations Among Identical And Similar Compounds In Protein-Ligand Docking, *Bioinform.*, 36(9), 2912-2914.
- Vijesh, A.M., Isloor, A.M., Telkar, S., Arulmoli, T., dan Fun, H. 2013, Molecular Docking Studies of Some New Imidazole Derivatives For Antimicrobial Properties, *Arab. J. Chem*, 6, 197–204.
- Wardaniati, I., dan Herli, M. A., 2018, Studi Molecular Docking Senyawa Golongan Flavonol Sebagai Antibakteri, *J. Pharm. Sci.*, 1(2), 20-27.
- Weyermann, J., Lochmann, D., dan Zimmer, A., 2005, A Practical Note on The Use of Cytotoxicity Assays, *Int. J. Pharm.*, 288(2), 369-376.
- Widiandani, T., dan Meiyanto, E., 2018, Docking and Antiproliferative Effect of 4-T-butylbenzoyl-3-allylthiourea on MCF-7 Breast Cancer Cells With/Without HER-2 Overexpression, *Proceedings of International Conference on Applied Pharmaceutical Sciences (ICoAPS)*, 18-19 Oktober 2018, Surabaya.
- Widiandani, T., Siswandono, S., Meiyanto, E., Sulistyowaty, M. I., Purwanto, B. T., dan Hardjono, S., 2018, New N-allylthiourea Derivatives: Synthesis, Molecular Docking and In Vitro Cytotoxicity Studies, *Trop. J. Pharm. Res.*, 17(8), 1607-1613.
- Wijianto, B., Purnomo, H., dan Nurrochmad, A., 2020, Curcumin Mono-Carbonyl Analogs As Potent Antibacterial Compounds: Synthesis, Biological Evaluation And Docking Simulation Study, *Rasayan J. Chem.*, 13(2), 1154-1165.
- William, F., 2022, Penambatan Molekul dan Simulasi Dinamika Molekul dari Analog Kurkumin Sebagai Kandidat Anti-Covid-19 Terhadap Protease Utama SARS-CoV-2, *Skrripsi*, Departemen Kimia FMIPA Universitas Gadjah Mada, Yogyakarta.
- Wu, A. D., dan Lu, H. L., 2021, A New Cu (II)-coordination Polymer: Inhibiting Bcl-2 Gene Expression in Retinal Cells and Exerting Treatment Activity on Diabetic Retinopathy, *Inorg. Nano-Met. Chem.*, 51(11), 1453-1458.
- Wulandari, R. P., 2018, Sintesis Analog Kurkumin Monoketon Berbahan Dasar 4-Benzilosibenzaldehyda dan Uji Aktivitasnya Sebagai Inhibitor Enzim Alfa-Amilase, *Skrripsi*, Departemen Kimia FMIPA Universitas Gadjah Mada, Yogyakarta.
- Yahmin, Y., Faqih, K., dan Suharti, S., 2019, Skrining Turunan Flavonoid Sebagai Kandidat Inhibitor Protease Nsp2 Dari Virus Chikungunya Menggunakan Molecular Docking, *J. Cis-Trans*, 3(1), 34-44.
- Yanti, D. A. M., dan Kholidah, S., 2016, Hubungan Dukungan Keluarga dengan Pengobatan Kanker Serviks, *Jurnal Ilmiah Kesehatan*, 5(9).



- Zeng, Z., Kociok-Kohn, G., Woodman, T. J., Rowan, M. G., dan Blagbrough, I. S., 2021, The  $^1\text{H}$  NMR Spectroscopic Effect of Steric Compression Is Found in [3.3. 1] Oxa-and Azabicycles and Their Analogues, *ACS omega*, 6(19), 12769-12786.
- Zhang, S., Xu, H., Zhang, L., dan Qiao, Y., 2020, Cervical cancer: Epidemiology, Risk Factors and Screening, *Chin. J. Cancer Res.*, 32(6), 720-728.
- Zhao, C., Liu, Z., dan Liang, G., 2013, Promising Curcumin-Based Drug Design: Mono-Carbonyl Analogues of Curcumin (MACs), *Curr. Pharm. Des.*, 19(11), 2114-2135.
- Zhou, X. L. dan Wang, M., 2015, Expression Levels Of Survivin, Bcl-2, and KAI1 Proteins in Cervical Cancer and Their Correlation with Metastasis, *Genet. Mol. Res.*, 14(4), 17059-17067.