

DAFTAR PUSTAKA

- Aghabarari, B., 2018, Room Temperature Synthesis of Mequinol by Using Ionic Liquids as Homogeneous Recyclable Catalysts, *IJCCE*, 37(2), 45 -52.
- Aitouna, A.O., Belghiti, M.E., Eşme, A., Anouar, E., Zeroual, A., Salah, M., Chekroun, A., El Abdallaoui, H.E.A., Benharref, A., dan Mazoir, N., 2021, Chemical Reactivities and Molecular Docking Studies of Parthenolide with The Main Protease of HEP-G2 and SARS-CoV-2, *J. Mol. Struct.*, 1243, 130705.
- Alamsyah, R., Susanti, I., Siregar, N.C., dan Heryani, S., 2013, Pengaruh Perbandingan Asam Format dan Hidrogen Peroksida dalam Pembuatan Senyawa Epoksi dari Minyak Kelapa Sawit, *JRI*, 30(02), 55 -74.
- Alkandahri, M.Y., dan Subarnas, A., 2017, Kandungan Senyawa Kimia dan Aktivitas Farmakologi Ekstrak Daun Kembang Bulan (*Tithonia diversifolia* (Hemsley) A. Gray) sebagai Antimalaria, *Farmaka*, 15(3), 170 -186.
- Alvarez-Idaboy, J.R., Reyes, L., dan Mora-Diez, N., 2007, The Mechanism of the Baeyer–Villiger Rearrangement: Quantum Chemistry and TST Study Supported by Experimental Kinetic Data, *Org. Biomol. Chem*, 5(22), 3682 - 3689.
- Ananda, N., Sabina, A., Rahmadani, U., Syahrizal, A., Deskya, N., Maria, S., Riza, M., Rahmadia, L., Holila, A., Putri, D., dan Gabriel, K., 2024, Malaria's Molecular Dance: Mechanism, Therapies, and Emerging Insights, *Pharmacia*, 71, 1 -12.
- Arisjulyanto, D., dan Suweni, K., 2024, Pengaruh Penyuluhan Terhadap Tingkat Pengetahuan Masyarakat Tentang Malaria Di Kabupaten Kepulauan Yapen, *JKTI*, 2(01), 1 -6.
- Artini, N.N.Y., dan Tatontos, E.Y., 2019, Analisis Jenis Plasmodium Penyebab Malaria Terhadap Hitung Jumlah Trombosit, *JAMBS*, 6(1), 58 -65.
- Avichena, A., dan Anggriyani, R., 2023, Analisis Penyakit Malaria Akibat Infeksi Plasmodium sp terhadap Darah Manusia, *Ekotonia: Jurnal Penelitian Biologi, Botani, Zoologi dan Mikrobiologi*, 8(1), 30 -37.
- Baker, J.R., Russell, C.C., Gilbert, J., Sakoff, J.A., dan McCluskey, A., 2020, Amino Alcohol Acrylonitriles as Activators of The Aryl Hydrocarbon Receptor Pathway: An Unexpected MTT Phenotypic Screening Outcome, *Chem. Med. Chem.*, 15(6), 490 -505.
- Bialangi, N., Mustapa, M.A., Salimi, Y.K., Widianoro, A., dan Situmeang, B., 2016, Antimalarial Activity and Phitochemical Analysis from Suruhan (*Peperomia pellucida*) Extract, *Jurnal Pendidikan Kimia*, 8(3), 183 -187.
- Bizzari, B.M., Fanelli, A., Piccinino, D., De Angelis, M., Dolfa, C., Palamara, A.T., Nencioni, L., Zippilli, C., Crucianelli, M., dan Saladino, R., 2019, Synthesis

- of Stilbene and Chalcone Inhibitors of Influenza A Virus by SBA-15 Supported Hoveyda-Grubbs Metathesis, *Catalysts*, 9(12), 983.
- Breilly, D., Fadlallah, S., Froidevaux, V., Lamaty, F., Allais, F., dan Métro, T.X., 2022, Sustainability and Efficiency Assessment of Vanillin Allylation: In Solution Versus Ball-milling. *Green Chem*, 24(20), 7874 -7882.
- Carneiro, P.F., Pinto, M.C., Marra, R.K., da Silva, F.D.C., Resende, J.A., e Silva, L.F.R., Alves, H.G., Barbosa, G.S., de Vasconcellos, M.C., Lima, E.S., dan Pohlit, A.M., 2016, Synthesis and Antimalarial Activity of Quinones and Structurally - related Oxirane Derivatives, *Eur. J. Med. Chem.*, 108, 134 -140.
- Chai, C., Qiao, X., Zheng, L., Duan, H., Bian, W., dan Choi, M.M., 2022, Nitrogen-Doped Carbon Dots a Fluorescent Probe for Detection of *p-Hydroxybenzaldehyde* and Cell Imaging, *Fuller. Nanotub. Carbon Nanostruct*, 30(5), 534 -542.
- Chang, M.Y., Lu, Y.J., dan Cheng, Y.C., 2015, m-CPBA-Mediated Stereoselective Synthesis of Sulfonyl Tetrahydropyrans, *Tetrahedron*, 71(8), 1192 -1201.
- Costantino, A., Dorn, V., Mandolesi, S., dan Koll, L., 2014, Olefin Epoxidation of α - β Unsaturated Esters. Comparison of Reactivity of Some Simple Esters and Enantiomerically Pure Diesters of TADDOL and BINOL: A Computational Study, In *The 18th International Electronic Conference on Synthetic Organic Chemistry*, Multidisciplinary Digital Publishing Institute.
- Crespo, M., Avery, T.D., Hanssen, E., Fox, E., Robinson, T.V., Valente, P., Taylor, D.K., dan Tilley, L., 2008, Artemisinin and a Series of Novel Endoperoxide Antimalarials Exert Early Effects on Digestive Vacuole Morphology, *Antimicrob. Agents Chemother.*, 52(1), 98 -109.
- Dembitsky, V.M., 2023, Bioactive Steroids Bearing Oxirane Ring, *Biomedicines*, 11(8), 2237.
- Edgar, D., 2022, Faktor Kondisi Fisik Rumah yang Berhubungan dengan Kejadian Malaria, *Jurnal Penelitian Perawat Profesional*, 4(1), 149 -156.
- Fatmayanti, B.R., 2023, Sintesis Epoksida Oleat dari Minyak Kelapa Sawit, Uji Sitotoksik terhadap Sel HeLa, T47D, WiDr, dan Vero serta Kajian Penambatan Molekuler pada Protein Fatty Acid Synthase (FASN), *Thesis*, FMIPA UGM, Yogyakarta.
- Fattorusso, E., dan Tagliatalata-Scafati, O., 2009, Marine Antimalarials, *Mar. Drugs*, 7(2), 130 -152.
- Fitriany, J., dan Sabiq, A., 2018, Malaria, *Jurnal Averrous*, 4(2), 2.
- Gamage, P. K., O'Brien, M., dan Karunanayake, L., 2009, Epoxidation of Some Vegetable Oils and Their Hydrolised Products with Peroxyformic Acid-optimised to Industrial Scale, *J. Nat Sci. Foundation Srilanka*, 37(4), 229 -240.

- Ghafur dan Mitarlis, 2014, Pembuatan Arang Aktif dari Limbah Padat Sintesis Furfural Berbahan Dasar Sekam Padi Melalui Aktivasi Kimia, *Unesa J. Chem.*, 3(3), 1 -8.
- Gomes, A.R., Varela, C.L., Tavares-da-Silva, E.J., dan Roleira, F.M., 2020, Epoxide Containing Molecules: A Good or a Bad Drug Design Approach, *Eur. J. Med. Chem.*, 201, 112327.
- Hamlin, T.A., Swart, M., dan Bickelhaupt, F.M., 2018, Nucleophilic Substitution (SN2): Dependence on Nucleophile, Leaving Group, Central Atom, Substituents, and Solvent, *Chem. Phys. Chem.*, 19(11), 1315 -1330.
- Hasna, dan Hermanto, F., 2024, Review Artikel: Peningkatan Kelarutan Senyawa Obat Antimalaria Menggunakan Metode Modifikasi Ko-Kristal, *Jurnal Buana Farma*, 4(3), 294 -305.
- Ihtiarintyas, S., Pauzi, R.Y., dan Setyanto, M.R., 2024, Studi Literatur: Potensi Buah Parijoto (*Medinilla speciosa*) sebagai Antimalaria, *Medical and Health Journal*, 4(1), 68 -73.
- Irjayanti, A., Wambrauw, A., Rumbiak, H., dan Wibowo, T.F., 2024, Peningkatan Kapasitas Perilaku Masyarakat dan Pelaksanaan Fogging Sebagai Upaya Pengendalian Vektor Malaria di Kelurahan Tanjung Ria, *I-Com: Indonesian Community Journal*, 4(1), 188 -197.
- Ismail, I.A., Riga, R., Suryani, O., Insani, M., Pernadi, N.L., dan Febriyanti, A., 2022, Analisis Spektrum 1H-NMR: Penjelasan Sederhana, *Int. J. Acad. Multidiscip. Res*, 6(12), 336 -342.
- Jensen, J.B., 2002, *In vitro* culture of Plasmodium parasites, *Methods Mol Med.*, 70, 477 -488.
- Kang, C.W., Han, Y.E., Kim, J., Oh, J.H., Cho, Y.H., dan Lee, E.J., 2017, 4-Hydroxybenzaldehyde Accelerates Acute Wound Healing Through Activation of Focal Adhesion Signalling in Keratinocytes, *Sci. Rep.*, 7(1), 14192.
- Keliat, R.A., 2018, Sintesis Eter Selulosa Hasil Alkoksilasi Epoksida Metil Ester Asam Lemak Minyak Biji Karet dengan Selulosa, *Skripsi*, FMIPA USU, Sumatera Utara.
- Kesuma, E.P., Ohto, K., dan Siswanta, D., 2016, Synthesis of C-4-Allyloxy-3-Methoxyphenylcalix Resorcinarene from Vanillin and Its Application as Adsorbent of Pb (II) Metal Cation, *Orient. J. Chem.*, 32(2), 769.
- Khanam, H., Singh, R., dan Pandey, J., 2023, A Density Functional Theory Study of 4-OH Aldehydes, *Chem. Proc.*, 14(1), 90.
- Kim, C., Traylor, T.G., dan Perrin, C.L., 1998, MCPBA Epoxidation of Alkenes: Reinvestigation of Correlation between Rate and Ionization Potential, *J. Am. Chem. Soc.*, 120(37), 9513 -9516.

- Kumar, N., Khan, S.I., Rajalakshmi, G., Kumaradhas, P., dan Rawat, D.S., 2009, Synthesis, Antimalarial Activity and Cytotoxicity of Substituted 3, 6-diphenyl-[1, 2, 4, 5] Tetraoxanes, *Bioor. Med. Chem.*, 17(15), 5632 -5638.
- Lee, J., Choi, J.W., Han, H.Y., Kim, W.S., Song, H.Y., Byun, E.B., Byun, E.H., Lee, Y.H., dan Yuk, J.M., 2020, 4-Hydroxybenzaldehyde Restricts the Intracellular Growth of *Toxoplasma Gondii* by Onducing SIRT1-mediated Autophagy in Macrophages, *Korean J. Parasitol.*, 58(1), 7.
- Ma, X., Liu, Y., Du, L., Zhou, J., dan Markó, I.E., 2020, Post-functionalization of Dibenzothiophene to Functionalized Biphenyls via a Photoinduced Thia-Baeyer-Villiger Oxidation, *Nat. Commun.*, 11(1), 914.
- Maatita, D.B., Ukratalo, A.M., dan Manery, D.E., 2024, Aktivitas Antimalaria Ekstrak *Sargassum Duplicatum* terhadap *Plasmodium Berghei* Strain ANKA Secara *in Vivo*, *Termometer: Jurnal Ilmiah Ilmu Kesehatan dan Kedokteran*, 2(3), 228 -238.
- Madayanti, S., Raharjo, M., dan Purwanto, H., 2022, Faktor Risiko Yang Mempengaruhi Kejadian Malaria di Wilayah Distrik Jayapura Selatan Kota Jayapura, *JKLI*, 21(3), 358 -365.
- Maisaroh, M., dan Purwanto, W., 2019, Tinjauan Termodinamika dan Kesetimbangan Kimia dalam Hubungan Perubahan Suhu terhadap Konversi Reaksi Epoksidasi Asam Oleat Berbasis Sawit, *In Prosiding Seminar Nasional Pengabdian Masyarakat*, LPPM UMJ.
- Mamedova, V.L., Khikmatova, G.Z., Korshin, D.E., Mamedova, S.V., Gavrilova, E.L., dan Mamedov, V.A., 2022, Epoxides: Methods of Synthesis, Reactivity, Practical Significance, *Russ. Chem. Rev.*, 91(11), RCR5049.
- Nandiyanto, A.B.D., Oktiani, R., dan Ragadhita, R., 2019, How to Read and Interpret FTIR Spectroscopy of Organic Material, *IJoST*, 4(1), 97 -118.
- Nitbani, F.O., 2007, Epoksidasi dan Pembukaan Cincin Epoksida pada Metil Risinoleat, *Thesis*, FMIPA UGM, Yogyakarta.
- Obreza, A., dan Perdih, F., 2012, Crystal Structures of 4-(oxiran-2-ylmethoxy) benzoic acid and 4-acetoxybenzoic Acid, *J. Struct. Chem.*, 53, 793 -799.
- Okazaki K. A., 2019, Case of Cervical Cancer that Healed Completely after Surgical Extirpation and Prevention of Recurrence with Oral Intake of 4-Hydroxybenzaldehyde. *J Gynecol Oncol.*, 2(3), 1016.
- Ouellette, R.J., dan Rawn, J.D., 2018, *Organic Chemistry: Structure, Mechanism, Synthesis*, Academic Press.
- Pambudi, A., Farid, M., dan Nurdiansah, H., 2017, Analisa Morfologi dan Spektroskopi Infra Merah Serat Bambu Betung (*Dendrocalamus asper*) Hasil Proses Alkalisasi sebagai Penguat Komposit Absorpsi Suara, *Jurnal Teknik ITS*, 6(2), 435 -440.

- Panchal, N.B., dan Vaghela, V.M., 2024, The Elegance of Epoxidation: Mechanistic Insights, Diverse Applications, and Promising Horizons, *Orient. J. Chem.*, 40(4), DOI: [10.133005/ojc/400410](https://doi.org/10.133005/ojc/400410).
- Purwanto, E., Savitri, E., dan Sivananda, C.A., 2011, Optimasi Suhu dan Konsentrasi Asam Asetat pada Reaksi Epoksidasi Metil Ester Minyak Sawit, *J. Tek. Kim.*, 5(2), 769.
- Putra, T.R.I., 2011, Malaria dan Permasalahannya, *JKS*, 11(2), 103-114.
- Qiu, C., Hu, Y., Wu, K., Yang, K., Wang, N., Ma, Y., Zhu, H., Zhang, Y., Zhou, Y., Chen, C., dan Li, S., 2016, Synthesis and Biological Evaluation of Allylated Mono-Carbonyl Analogues of Curcumin (MACs) as Anti-Cancer Agents for *Cholangiocarcinoma*, *BMCL*, 26(24), 5971 -5976.
- Rahmah, Z., 2017, Malaria Pada Kehamilan Dan Konsekuensinya Pada Ibu Dan Janin, *J. Islam. Med.*, 1(1), 30 -43.
- Rinidar, A., Isa, M., dan Armansyah, T., 2013, Nilai Inhibition Concentration (IC50) Ekstrak Metanol Daun Sernai (*Wedelia biflora*) terhadap *Plasmodium falciparum* yang diinkubasi selama 32 dan 72 Jam, *Jurnal Medika Veterinaria*, 7(1), 1 -4.
- Saefurohman, A., Sugita, P., dan Achmadi, S.S., 2012, Epoksida dan Kinetika Minyak Jarak Pagar Sebagai Pemplastis Film Polivinil Klorida. *Jurnal Kimia Valensi*, 2(3), 420 -429.
- Sajjadi, S.E., Pestechian, N., Kazemi, M., Mohaghegh, M.A., dan Hosseini-Safa, A., 2016, Evaluation of the Antimalarial Effect of *Ferulago angulata* (Schlecht.) Boiss. Extract and Suberosin Epoxide Against *Plasmodium berghei* in Comparison with Chloroquine Using In-Vivo Test, *IJPR*, 15(3), 515.
- Salomatina, O.V., Sen'kova, A.V., Moralev, A.D., Savin, I.A., Komarova, N.I., Salakhutdinov, N.F., Zenkova, M.A., dan Markov, A.V., 2022, Novel Epoxides of Soloxolone Methyl: An Effect of The Formation of Oxirane Ring and Stereoisomerism on Cytotoxic Profile, Anti-Metastatic and Anti-Inflammatory Activities *In Vitro* and *In Vivo*, *Int. J. Mol. Sci.*, 23(11), 6214.
- Sema, G., Mutiara, H., dan Soleha, T.U., 2023, Tatalaksana Malaria Berat, *MEDULA*, 13(1), 83 -90.
- Syaadiyah, H., 2023, Sintesis N-fenilpirazolina dari Turunan Metoksibenzaldehida dan 2-asetilpiridin serta Uji Aktivitasnya sebagai Antimalaria, *Thesis*, Universitas Gadjah Mada.
- Syahri, J., Yuanita, E., Nohrohma, B. A., Armunanto, R., dan Purwono, B., 2017, Chalcone Analogue as Potent Anti-malarial Compounds Against *Plasmodium falciparum*: Synthesis, Biological Evaluation and Docking Simulation Study, *Asian Pac. J. Trop. Biomed.*, 7(8), 675 -679.
- Tooy, D.C., Bernadus, J.B., dan Sorisi, A., 2016, Deteksi *Plasmodium Falciparum* dengan Menggunakan Metode Real-Time Polymerase Chain Reaction di Daerah Likupang dan Bitung, *eBM*, 4(1), 1 -9.

- Veronica, E., Amelia, I., Yunatan, K.A., Chrismayanti, N.K.S.D., dan Mahendra, A.N., 2020, Potensi Kombinasi Ekstrak Daun Kelor (*Moringa oliefera*) dan Artemisia (*Artemisia annua*) Sebagai Antimalaria *Plasmodium falciparum*, *Jurnal Ilmiah Kesehatan Sandi Husada*, 9(2), 831 -841.
- Xia, J., Su, Y., dan Li, W., 2019, Post-polymerization Functionalization to a Novel Phosphorus-and Nitrogen-containing Polyether Coating for Flame Retardant Treatment of PET Fabric, *J. App. Polym. Sci.*, 136(16), 47299.
- Xiong, Q., Yang, S., Peng, C., Xie, F., Gu, Z., Fu, Y., Tan, H., Dai, Q., Yi, W., Li, L., dan Liu, K., 2023, Epoxidation Modification of Strictly Alternating Copolymer Via Living and Controlled Anionic Alternating Copolymerization of 1, 3-Pentadiene and Styrene Derivatives, *J. Polym. Res.*, 30(8), 326.
- Yadav, N.D., 2012, Antimalarial Activity of Newly Synthesized Chalcone Derivatives In Vitro, *Chem. Biol. Drug.*, 80, 340 -347.
- Yang, J., Liu, X., Huang, C., Zhou, C., Li, Y., dan Zhu, D., 2010, Construction and Photophysical Properties of Organic-Inorganic Nanonetworks Based on Oligo (phenylenevinylene) and Functionalized Gold Nanoparticles, *Chem. Phys. Chem.*, 11(3), 659 -664.
- Yeo, S.J., Liu, D.X., Kim, H.S., dan Park, H., 2017, Anti-malarial Effect of Novel Chloroquine Derivatives as Agents for the Treatment of Malaria, *Malar. J.*, 16, 1 -9.