

DAFTAR PUSTAKA

- Adianti, S. N., & Ayuningrum, F. (2023). Pengaruh Label Halal Terhadap Keputusan Pembelian Produk Kosmetik Wardah. *Jurnal Alfatih Global Mulia*, 5(1), 45–56. <https://doi.org/10.59729/alfatih.v5i1.60>
- Adjeng, A. N. T., Koedoes, Y. A., Ali, N. F. M., Palogan, A. N. A., & Damayanti, E. (2023). Edukasi Bahan dan Penggunaan Kosmetik Yang Aman di Desa Suka Banjar Gedong Tataan Kabupaten Pesawaran. *Jurnal Kreativitas Pengabdian Kepada Masyarakat*, 6(1), 89–102. <https://doi.org/10.33024/jkpm.v6i1.8041>
- Akbar, M. R. P. K., Hanik, F. P. M., Shabrina, A., & Zulfa, E. (2020). Formulasi Spray Gel Ekstrak Etanol Biji Kedelai (*Glycine max*) Sebagai Sediaan Kosmetik Tabir Surya. *Jurnal Ilmu Farmasi Dan Farmasi Klinik*, 17(2), 44–50. <https://doi.org/10.31942/jiffk.v17i2.4067>
- Aktifa, A. F., Rahmayanti, M., & Amalina, F. (2024). Formulasi Spray Sunscreen dengan Variasi Konsentrasi Ekstrak Daun Wungu. *Indonesian Journal of Pharmaceutical Science and Technology*, 11(2), 207–216.
- Alitonang, A. P., Amir, I. H., & Milda, M. (2025). Formulasi dan Uji Stabilitas Sediaan Face Spray Ekstrak Etanol Daun Pepaya (*Carica Papaya L.*). *Jurnal Riset Ilmu Kesehatan Umum Dan Farmasi*, 3(1), 166–174. <https://doi.org/10.57213/jrikuf.v3i1.544>
- Ana, K. D., Astuti, L. W., & Afiani, N. (2024). *Keperawatan Medikal Bedah* (Vol. 1, Issue 2). PT. Nuansa Fajar Optimal.
- Arifin, A., Pakki, E., & Fitrah. (2023). Formulasi dan Uji Stabilitas Fisik Sediaan Losio Bubur Rumpun Laut (*Euclima alvarezii* (Doty)) Asal Kabupaten Luwu Sulawesi Selatan. *Jurnal Farmamedika*, 8(2), 174–184. <https://doi.org/10.47219/ath.v8i2.251>
- Ariyanti, Masruriati, E., Lindawati, N. Y., Setyowati, D., & Nurulita, F. M. (2022). Uji Spray Lotion Sunscreen Buah Tomat (*Licopersicon esculentum* Mill). *Prosiding Seminar Informasi Kesehatan Nasional*, 91–102. <https://doi.org/10.47701/sikenas.vi.1670>

- Asfi, D., & Rahmadani, R. A. (2022). Pembuatan dan Uji Mutu Fisik Masker Peel-Off Dari Pati Jagung (*Zea Mays L.*). *Jurnal Kesehatan Yamas Makassar*, 6(1), 26–32.
- Aspadih, V., Suryani, Zubaydah, W. O. S., Indalifiany, A., & Muliadi, R. (2023). review: Perawatan Kulit dengan Niacinamide Sebagai Bahan Aktif. *Lansau: Jurnal Ilmu Kefarmasian*, 1(1), 68–76. <https://doi.org/10.33772/lansau.v1i1.8>
- Aspadih, V., Zubaydah, W. O. sitti, Anwar, R. M. I., & Jumilta. (2024). Formulasi, Evaluasi dan Uji Iritasi Sediaan Toner Niacinamide. *Lansau: Jurnal Ilmu Kefarmasian*, 2(1), 1–10. <https://doi.org/10.33772/lansau.v2i1.20>
- Avianka, V., Mardhiani, Y. D., & Santoso, R. (2022). Studi Pustaka Peningkatan Nilai SPF (Sun Protection Factor) pada Tabir Surya dengan Penambahan Bahan Alam. *Jurnal Sains Dan Kesehatan*, 4(1), 79–88. <https://doi.org/10.25026/jsk.v4i1.664>
- Barbosa, M., Amorim, R. P. de, Cassiano, D., Dias, M., Abreu, A. F. de, Bagatin, E., Miot, H. A., & Esposito, A. C. C. (2024). Efficacy and Safety of Nicotinamide 10%, Associated with Magnesium Ascorbyl Phosphate 5% and Hyaluronic Acid 5%, Compared to Hydroquinone 4% in Women with Facial Melasma: A Randomized, Double-Blind, Controlled Clinical Trial. *Clinical, Cosmetic and Investigational Dermatology*, 17, 2215–2223. <https://doi.org/10.2147/CCID.S473224>
- Basto, R., Andrade, R., Nunes, C., Lima, S. A. C., & Reis, S. (2021). Topical Delivery of Niacinamide to Skin Using Hybrid Nanogels Enhances Photoprotection Effect. *Pharmaceutics*, 13(1968), 16. <https://doi.org/10.3390/pharmaceutics13111968>
- Bhattacharjee, S., Beck-broichsitter, M., & Banga, A. K. (2020). In Situ Gel Formation in Microporated Skin for Enhanced Topical Delivery of Niacinamide. *Pharmaceutics*, 12(472), 9–11. <https://doi.org/10.3390/pharmaceutics12050472>
- Boo, Y. C. (2021). Mechanistic Basis and Clinical Evidence for the Applications of Nicotinamide (Niacinamide) to Control Skin Aging and Pigmentation. *Antioxidants*, 10(1315). <https://doi.org/10.3390/antiox10081315>
- Budiarti, I. S. (2023). *Seri Pancaindra: Indra Peraba kulit*. Bumi Aksara.

- Cahyani, A. S., & Erwiyani, A. R. (2021). Formulasi dan Uji Sun Protection Factor (SPF) Sediaan Krim Ekstrak Etanol 70% Daging Buah Labu Kuning (*Curcubita Maxima* Durh) Secara In Vitro. *Jurnal Farmasi (Journal of Pharmacy)*, 9. <https://doi.org/10.37013/jf.v2i1.149>
- Chemists, S. of G. (2018). *Data sheets for evaluating the effectiveness of active ingredients in cosmetic products*.
- Chinwala, F., Shah, C., & Upadhyay, U. (2024). Optimizing Film-Forming Sprays: Evaluation and Enhancement of Polymers and Excipients for Improved Topical Drug Delivery. *International Journal of Pharmaceutical Sciences*, 2(9), 187–216. <https://doi.org/10.5281/zenodo.13647309>
- Dampati, P. S., & Veronica, E. (2020). Potensi Ekstrak Bawang Hitam sebagai Tabir Surya terhadap Paparan Sinar Ultraviolet. *KELUWIH: Jurnal Kesehatan Dan Kedokteran*, 2(1), 23–31. <https://doi.org/10.24123/kesdok.v2i1.3020>
- Depkes RI. (1995). Farmakope Indonesia edisi IV. In *Departemen Kesehatan Republik Indonesia*.
- Draelos, Z. (2016). *Second Edition: Cosmetic Dermatology*. WILEY Blackwell.
- Fadilah, I., Sudarmawan, G., & Yusyama, A. Y. (2022). Pengaruh Jarak Tempuh Sepeda Motor Terhadap Nilai Viskositas Pelumas SAE 10w-40 dengan Metode Ostwald. *Prosiding Seminar Nasional Teknik Mesin Politeknik Negeri Jakarta*, 12(1), 1067–1073. <https://prosiding.pnj.ac.id/index.php/sntm/article/view/156>
- Fitri, E. W. (2018). Hyaluronan dalam Bidang Dermatologi. *Jurnal Kedokteran Nanggroe Medika*, 1(1), 7. <https://doi.org/10.35324/jknamed.v1i1.13>
- Fitriyah, Q., Siahaan, Y. D., & Wahyudi, M. P. E. (2022). Alat Sterilisasi Lampu UVC Portable Berbasis IOT. *Jurnal Integrasi*, 14(1), 8–13. <https://doi.org/10.30871/ji.v14i1.3599>
- Florey, K., Al-Badr, A. A., Brenner, G. S., Brittain, H., Forcier, G. A., Mazzo, D. J., & Wozniak, T. J. (1991). *Analytical Profiles of Drug Substances* (Vol. 20).
- Geoffrey, K., Mwangi, A. N., & Maru, S. M. (2019). Sunscreen Products: Rationale For Use , Formulation Development and Regulatory Considerations. *Saudi Pharmaceutical Journal*, 27(7), 1009–1018. <https://doi.org/10.1016/j.jsps.2019.08.003>

- Hartini, T., & Haqq, B. N. (2023). Perancangan Animated Infographics Mengenai Fungsi Niacinamide untuk Kesehatan Kulit untuk generasi Z. *Jurnal IKRAITH-HUMANIORA*, 7(1), 71–81. <https://doi.org/10.37817/ikraith-humaniora.v7i1.2272>
- Hutabarat, R., & Yuniarti, M. (2024). Tingkat Pengetahuan dan Sikap Masyarakat Dalam Penggunaan Serum vitamin C Untuk Meningkatkan Kesehatan Wajah di Kelurahan Sukamantri, Kabupaten Tangerang. *Indonesia Natural Research Pharmaceutical Journal*, 9(1), 39–48. <https://doi.org/10.52447/inrpj.v9i1.7261>
- ICH. (2003). *Stability Testing of New Drug Substances and Products Q1A (R2)* (Vol. 4, Issue February).
- Indalifiany, A., Zubaydah, W. S., & Kasim, E. R. (2023). Formulasi Spray Gel Ekstrak Batang Etlingera rubroloba Menggunakan HPMC sebagai Gelling Agent. *Jurnal Sains Dan Kesehatan*, 5(2), 140–148. <https://doi.org/10.25026/jsk.v5i2.1729>
- Indarto, I., Nasution, S. P., Suci, A. D. A., & Cane, H. P. C. A. (2024). Pengembangan Krim Tabir Surya Herbal Menggunakan Clitoria ternatea dan Aloe vera: Formulasi , Penilaian Kualitas , dan Efikasi In Vivo. *Jurnal Farmasi Indonesia*, 21(2). <https://doi.org/10.31001/jfi.v21i2.2505>
- Inggriyani, C. G., & Hidayaturrahmi. (2022). Histofisiologi Reseptor Sensoris Kulit. *Jurnal Sinaps*, 5(3), 10–17.
- Jovanovic, A. S., Martinovic, M., Žugic, A., Nesic, I., Tosti, T., Blagojevic, S., & Tadic, V. M. (2023). Derivatives of L-Ascorbic Acid in Emulgel: Development and Comprehensive Evaluation of the Topical Delivery System. *MDPI Journal Pharmaceutics*, 15(813). <https://doi.org/10.3390/pharmaceutics15030813>
- Kalangi, S. J. R. (2013). Histofisiologi Kulit. *Jurnal Biomedik*, 5(3), 12–20. <https://doi.org/10.35790/jbm.5.3.2013.4344>
- Kandil, S. M., Soliman, I. I., Diab, H. M., Bedair, N. I., Mahrous, M. H., & Abdou, E. M. (2022). Magnesium Ascorbyl Phosphate Vesicular Carriers for Topical Delivery; preparation, In-Vitro and Ex-vivo Evaluation, Factorical Optimization and Clinical Assessment in Melasma Patients. *Drug Delivery*,

- 29(1), 534–547. <https://doi.org/10.1080/10717544.2022.2036872>
- Kumar, A., & Madan, K. (2025). Formulation and Evaluation of Sunscreen for Photoprotection. *International Journal of Pharmaceutical Sciences*, 3(6), 2934–2944. <https://doi.org/10.5281/zenodo.15710781>
- Kurnianto, E., & Rahman, I. R. (2022). Potensi Tabir Surya Ekstrak Etanol Daun Matoa (*Pometia pinnata*) Dengan Konsentrasi Pelarut. *Jurnal Ilmiah Ibnu Sina*, 7(1), 102–108. <https://doi.org/10.36387/jiis.v7i1.835>
- Kusumaratni, D. A., & Prasetyo, E. Y. (2023). Hubungan Tingkat Pengetahuan Terhadap Penggunaan Sunscreen Pada Mahasiswa Farmasi. *Enfermeria Ciencia*, 1(November 2023), 105–113.
- Li, C., He, R., He, Z., Kumar, S. S., Fredericks, S. A., Jr, C. J. H., & Hong, J. (2021). Spatially-Resolved Characterization of Oil-in-Water Emulsion Sprays. *International Journal of Multiphase Flow*, 145(103813). <https://doi.org/10.1016/j.ijmultiphaseflow.2021.103813>
- Maiese, K. (2021). Nicotinamide as a Foundation for Treating Neurodegenerative Disease and Metabolic Disorders. *Departement of Health & Human Services*, 18(1), 134–149. <https://doi.org/10.2174/1567202617999210104220334>.
- Maulana, F. A., Sukmawati, A., Fauzi, A., & Wahyuni, A. S. (2024). Formulasi dan Penilaian Fisik Sediaan Spray Minyak Kemiri (*Aleurites moluccana* (L .) Wild) dan Seledri (*Apium graveolens*) sebagai Pertumbuhan Rambut. *Jurnal Pharmascience*, 11(2), 284–303. <https://doi.org/10.20527/jps.v11i2.20283>
- Minerva, P. (2019). Penggunaan Tabir Surya Bagi Kesehatan Kulit. *Jurnal Pendidikan Dan Keluarga*, 11(1). <https://doi.org/10.24036/jpk/vol11-iss1/619>
- Mu'awanah, I. A. U., Setiaji, B., & Syoufian, A. (2014). Pengaruh Konsentrasi Virgin Coconut Oil (VCO) Terhadap Stabilitas Emulsi Kosmetik dan Nilai Sun Protection Factor (SPF). *Berkala MIPA*, 24(1), 1–11.
- Nafiah, sahla R., Fitraneti, E., Rizal, Y., Primawati, I., & Hamama, D. A. (2024). Pengaruh Paparan Sinar Ultraviolet terhadap Kesehatan Kulit dan Upaya Pencegahannya: Tinjauan Literatur. *Scientific Journal*, 3(3), 188–192. <http://journal.scientic.id/index.php/sciena/issue/view/19>
- Nugroho, I., Putri, N., Adji, J. E. P., Nur, S. R., & Sekarningrum, N. A. (2024). Tinjauan Kritis Kemampuan Fourier Transform Infrared Spectroscopy (FTIR)

- dalam Analisis dan Karakterisasi Senyawa Obat. *Journal Ilmiah Wahana Pendidikan*, 10(15), 332–344. <https://doi.org/10.5281/zenodo.13777154>
- Pawar, N., & Jalwal, P. (2021). Non-Pressurized Topical Spray Pharmaceutical-Methodology of Formulation Development and Quality Control Management. *International Journal of Pharmaceutical Investigation*, 11(3), 260–268. <https://doi.org/10.5530/ijpi.2021.3.46>
- Prakoeswa, F. R. S., Maharani, F., Satria, Y. A. A., Awanis, G. S., & Febrianty, A. F. (2023). Topical anti-Aging: State-of-the-art review. *Journal of the Medical Sciences (Berkala Ilmu Kedokteran)*, 55(4), 372–383. <https://doi.org/10.19106/jmedsci005504202309>
- Puspita, W., Puspasari, H., & Restanti, N. A. (2020). Formulasi dan Pengujian Sifat Fisik Sediaan Spray Gel Ekstrak Etanol Daun Buas-Buas (*Premna serratifolia* L.). *Jurnal Ilmiah Farmako Bahari*, 11(2), 145–152. <https://doi.org/10.52434/jfb.v11i2.798>
- Rachmawati, P., Sagala, R. J., & Kambira, P. F. A. (2021). Tinjauan Pustaka Bentuk Sediaan Tabir Surya Bahan Alam, Keamanan dan Efektivitas Tabir Surya. *Jurnal Farmasi Indonesia*, 13(1), 25–39. <https://doi.org/10.35617/jfionline.v13i1.45>
- Rahayu, S. T., Sari, R. Y., Mahayasih, P. G. W., Utami, T. P., & Eden, Y. (2023). Penentuan Sun Protection Factor (SPF) dan Antioksidan Ekstrak Alga Hijau (*Ulva reticulata* Forsskal) sebagai Tabir Surya dengan Spektrofotometer UV-Vis. *Archives Pharmacia*, 5(1), 50–62. <https://doi.org/10.47007/ap.v5i1.6354>
- Rähse, W. (2020). *Cosmetic Creams Development, Manufacture and Marketing of Effective Skin Care Products*. Wiley-VCH.
- Rejeki, S., & Wahyuningsih, S. S. (2015). Formulasi Gel Tabir Surya Minyak Nyamplung (Tamanu oil) dan Uji Nilai SPF Secara In Vitro. *University Research Colloquium*, 97–103.
- Rettob, M. S. A., Abdillah, M. A., Zulsyah, B. M., Shabrina, F. N., & Maruli, K. (2025). Tinjauan Literatur : Mekanisme Niacinamide dalam Menghambat Melanin : sebagai Agen Pencerah Kulit. *Hikamatzu Journal Of Multidisiplin*, 2(2), 0–4.
- Rumanti, R. M., Fitri, K., Kumala, R., Leny, & Hafiz, I. (2022). Formulasi Sediaan

- Krim Anti Aging dari Ekstrak Etanol Daun Pagoda (*Clerodendrum paniculatum* L.). *Majalah Farmasetika*, 7(4), 288–304. <https://doi.org/10.24198/mfarmasetika.v7i4.38491>
- Salsabila, E., Wulandari, F., & Rohana, E. (2024). Formulation and SPF Value Evaluation of Sunscreen Spray Gel Containing Lime Peel Extract (*Citrus aurantifolia*). *Jurnal Farmasi Dan Ilmu Kefarmasian Indonesia*, 11(1), 42–52. <https://doi.org/10.20473/jfiki.v11i12024.42-52>
- Sohn, J. sun, & Choi, J.-S. (2023). Development and Evaluation of Niacinamide Transdermal Formulation by Artificial Membrane Permeability. *Saudi Pharmaceutical Journal*, 31(7), 1229–1236. <https://doi.org/10.1016/j.jsps.2023.05.018>
- Swiader, K., & Marczevska, M. (2021). Trends of Using Sensory Evaluation in New Product Development in the Food Industry in Countries That Belong to the EIT Regional Innovation Scheme. *MDPI Journal Foods*, 10(446). <https://doi.org/10.3390/foods10020446>
- Syach, M. F., Zulkarnain, A. K., & Ritmaleni. (2024). Formulasi dan Uji Stabilitas Fisik Sediaan Krim Tabir Surya Pentagamavunon- 5 Serta Uji Aktivitasnya Secara In Vitro. *Majalah Farmaseutik*, 20(2), 145–153. <https://doi.org/10.22146/farmaseutik.v20i2.95459>
- Umar, A. K., Butarbutar, M., Sriwidodo, S., & Wathoni, N. (2020). Film-Forming Sprays for Topical Drug Delivery. *Drug Design, Development, and Therapy*, 14, 2909–2925. <https://doi.org/10.2147/DDDT.S256666>
- Utami, S. M., & Laurany, Q. (2019). Pengaruh Basis Carbopol Terhadap Formulasi Sediaan Gel Dari Ekstrak Daun Katuk (*Sauropus androgynus* (L.) Merr). *Edu Masda Jurnal*, 1–12. <https://doi.org/10.52118/edumasda.v3i1.22>
- WHO. (2020). *GLOBAL SOLAR UV INDEX A Practical Guide*.
- Wibawa, G. E., Yuar, A. A., Rahmawati, F., Maurae, P. N. V., Hakim, B. S. O., Bisa, M. R. Y., Paramadinda, N. M. A. M. S., Aulia, S. Z., & Rabbani, Y. U. (2025). Effectiveness of Sunscreen in Preventing Skin Problems. *Jurnal Biologi Tropis*, 25(4), 5137–5144. <https://doi.org/10.29303/jbt.v25i4.10301>
- Widolaras, R., & Ikhsanto, M. N. (2022). Sistem Pendukung Keputusan Pemilihan Tabir Surya Wajah untuk Kulit Berminyak Menggunakan Metode Analytical

- Hierarchy Process. *Jurnal Teknologi Informatika Dan Komputer MH. Thamrin*, 8(2), 431–440. <https://doi.org/10.37012/jtik.v8i2.1324>
- Widyowati, U., Genatrika, E., & Djalil, A. D. (2024). Development of Sunscreen Products Containing *Stichopus hermanii* Semper, 1868. *Medical Sains: Jurnal Ilmiah Kefarmasian*, 9(3), 783–790. <https://doi.org/10.37874/ms.v9i3.1138>
- Xu, X., Wozniczka, M., Hecke, K. Van, Buyst, D., Mara, D., Vervaet, C., Herman, K., Wynendaele, E., Deconinck, E., & Spegeleer, B. De. (2020). Structural study of 1 - ascorbic acid 2 - phosphate magnesium , a raw material in cell and tissue therapy. *JBIC Journal of Biological Inorganic Chemistry*, July. <https://doi.org/10.1007/s00775-020-01801-3>
- Zainudin, M. Y., & Chabib, L. (2023). Cosmetovigilance : Beautiful is Pain. *Jurnal Farmasi Sains Dan Terapan*, 10(1), 65–71. <https://doi.org/10.33508/jfst.v10i1.4132>