

DAFTAR PUSTAKA

- Alfattah, M., & Gusti Ayu Arwati, I. (2022). Analisis laju korosi logam stainless steel 316L di media air laut menggunakan metode elektrokimia. *Journal of New Energies and Manufacturing (JONEM)*, 1(2), 29–35. <https://doi.org/10.22441/jonem.v1i2.15903>
- Augustin, A., Huilgol, P., Udupa, K. R., & Bhat K, U. (2016). Effect of current density during electrodeposition on microstructure and hardness of textured Cu coating in the application of antimicrobial Al touch surface. *Journal of the Mechanical Behavior of Biomedical Materials*, 63, 1–9. <https://doi.org/10.1016/j.jmbbm.2016.07.013>
- Bailey, G. L. J. (1950). Electrodeposition on Aluminium—A Study of the Zincate Process. *Transactions of the IMF*, 27, 1–31. <https://doi.org/10.1080/00202967.1950.11869563>
- Bard, A. J. ., & Faulkner, L. R. . (2001). *Electrochemical methods : fundamentals and applications* (2nd ed.). John Wiley & Sons, Inc. <https://doi.org/10.1023/A:1021637209564>.
- Caliister, William. D., & Rethwish, D. G. (2018). *Materials Science and Engineering An Introduction by William D. Callister, Jr., David G. Rethwish (z-lib.org)* (10th ed.). Wiley.
- Chang, S.-C., Shieh, J.-M., Dai, B.-T., Feng, M.-S., & Li, Y.-H. (2002). The Effect of Plating Current Densities on Self-Annealing Behaviors of Electroplated Copper Films. *Journal of The Electrochemical Society*, 149(9), 1–4. <https://doi.org/10.1149/1.1500348>
- Cipta, D., & Ramli, I. (2023). *The Influence of Variation of Electrical Current and Electroplating Process Time on Coating Thickness, Glossiness and Adhesion of Copper on Low Carbon Steel*. 117–124. <https://doi.org/10.5220/0010941000003260>
- Cipto, C., Sariman, F., Prayitno, A., & Rusdi, M. (2025). Analysis of Anti-Corrosion Electroplating Coating on Metal as Raw Material for Car Tanks. *Mathematical Modelling of Engineering Problems*, 12(5), 1587–1593. <https://doi.org/10.18280/mmep.120513>

- Darmawi. (2018). *Hak penerbitan pada Penerbit Universitas Sriwijaya* (2nd ed.). Universitas Sriwijaya.
- Devyatkina, T. I., Luchneva, S. I., Vasin, E. N., Cherkashev, N. A., Isaev, V. V., Belyaev, E. S., & Rogozhin, V. V. (2020). Surface Preparation of Aluminum Alloys for Electroplating. *Russian Journal of Applied Chemistry*, 93(9), 1–8. <https://doi.org/10.1134/S1070427220090098>
- Fakultas Teknik, Universitas Negeri Jakarta. (2023). *Buku panduan penyusunan skripsi program sarjana*.
- Giurlani, W., Zangari, G., Gambinossi, F., Passaponti, M., Salvietti, E., Di Benedetto, F., Caporali, S., & Innocenti, M. (2018). Electroplating for decorative applications: Recent trends in research and development. In *Coatings* (Vol. 8, Number 8, pp. 1–25). MDPI AG. <https://doi.org/10.3390/coatings8080260>
- Gugua, E. C., Ujah, C. O., Asadu, C. O., Von Kallon, D. V., & Ekwueme, B. N. (2024). Electroplating in the modern era, improvements and challenges: A review. *Hybrid Advances*, 7, 1–14. <https://doi.org/10.1016/j.hybadv.2024.100286>
- Guo, L., Li, S., He, Z., Fu, Y., Qiu, F., Liu, R., & Yang, G. (2024). Electroplated Copper Additives for Advanced Packaging: A Review. *ACS Omega*, 9(19), 1–11. <https://doi.org/10.1021/acsomega.4c01707>
- Han, K. H., Lee, S. B., & Hong, I. K. (2012). Barrel plating process specification for undercoating with copper cyanate. *Journal of Industrial and Engineering Chemistry*, 18(3), 1–10. <https://doi.org/10.1016/j.jiec.2011.11.066>
- Hasanudin, L., Kadir, A., Sudia, B., & Seru Dwi Saputra, J. (2022). *Aplikasi Pelapisan Nikel Pada Aluminium Dengan Proses Elektroplating*. <https://doi.org/10.33772/jfe.v7i4.35>
- Kanani, N. (2004). *Electroplating-Basic Principles, Processes and Practice* (1st ed.). Elsevier.
- Kawakami, R., Saeki, R., Munetoh, S., & Ohgai, T. (2023). Micro-Vickers Hardness of Cu and Cu₂O Dual Phase Composite Films Electrodeposited from Acidic Aqueous Solutions Containing Polyethylene Glycol. *Crystals*, 13(12), 1–12. <https://doi.org/10.3390/cryst13121654>

- Korzekwa, J. (2023). Modification of the structure and properties of oxide layers on aluminium alloys: A review. *Reviews on Advanced Materials Science*, 62, 1–26. <https://doi.org/10.1515/rams-2023-0108>
- Kruglikov, S. S., Kudriavtsev, N. T., Vorobiova, G. F., & Antonov, A. Y. (1965). ON THE MECHANISM OF LEVELLING BY ADDITION AGENTS IN ELECTRODEPOSITION OF METALS*. *Electrochimica Acta*, 10, 1–9. [https://doi.org/10.1016/0013-4686\(65\)87023-2](https://doi.org/10.1016/0013-4686(65)87023-2)
- Lee, S. K., Lee, J. H., & Kim, Y. H. (2007). Nucleation and growth of zinc particles on an aluminum substrate in a zincate process. *Journal of Electronic Materials*, 36(11), 1–6. <https://doi.org/10.1007/s11664-007-0280-8>
- Liao, C.-N., Lin, C.-Y., Huang, C.-L., & Lu, Y.-S. (2013). Morphology, Texture and Twinning Structure of Cu Films Prepared by Low-Temperature Electroplating. *Journal of The Electrochemical Society*, 160(12), 1–5. <https://doi.org/10.1149/2.014312jes>
- Lowenheim, F. A., & MacIntosh, R. M. (2017). The Development of Tin-Zinc Alloy Plating in the U.S.A. *Transactions of the IMF*, 27(1), 115–128. <https://doi.org/10.1080/00202967.1950.11869556>
- Manu, R., & Jayakrishnan, S. (2013). Effect of additive and current density on microstructure and texture characteristics of copper electrodeposits. *International Journal of Materials Research*, 1–8. <https://doi.org/10.3139/146.110848>
- Mladenović, I. O., & Nikolić, N. D. (2023). Influence of Parameters and Regimes of the Electrodeposition on Hardness of Copper Coatings. In *Metals* (Vol. 13, Number 4, pp. 1–36). MDPI. <https://doi.org/10.3390/met13040683>
- Paunovic, Milan., & Schlesinger, Mordechai. (2010a). *Modern electroplating* (5th ed.). Wiley. <https://doi.org/10.1002/9780470602638>
- Paunovic, Milan., & Schlesinger, Mordechai. (2010b). *Modern electroplating* (M. Schlesinger & M. Paunovic, Eds.; 5th ed.). Wiley.
- Pimenov, D. Y., Kiran, M., Khanna, N., Pintaude, G., Vasco, M. C., da Silva, L. R. R., & Giasin, K. (2023). Review of improvement of machinability and surface integrity in machining on aluminum alloys. *International Journal of Advanced*

- Manufacturing Technology*, 129, 1–37. <https://doi.org/10.1007/s00170-023-12630-4>
- Rautio, T., Torbati-Sarraf, H., Allam, T., Järvenpää, A., & Hamada, A. (2022). Enhancement of electrical conductivity and corrosion resistance by gold-nickel coating of additively manufactured AlSi10Mg alloy. *Journal of Materials Research and Technology*, 17, 521–16. <https://doi.org/10.1016/j.jmrt.2022.01.022>
- Robertson, S. G., Ritchie, I. M., & Druskovich, D. M. (1995). A kinetic and electrochemical study of the zincate immersion process for aluminium. In *JOURNAL OF APPLIED ELECTROCHEMISTRY* (Vol. 25). <https://doi.org/10.1007/BF00241927>
- Rosyidan, C., Maulani, M., Samura, L., & Ridaliani, O. (2022). Proses Pelapisan Nikel Diatas Al Dengan Metode Elektroplating. *Jurnal Teori dan Aplikasi Fisika*, 10, 1–8. <https://doi.org/10.23960/jtaf.v10i1.2834>
- Sadiku-Agboola, O., Sadiku, E. R., Ojo, O. I., Akanji, O. L., & Biotidara, O. F. (2011). Influence of Operation parameters on Metal deposition in bright Nickel-plating Process. *Portugaliae Electrochimica Acta*, 29(2), 91–10. <https://doi.org/10.4152/pea.201102091>
- Susetyo, F. B., Fajrah, M. C., & Soegijono, B. (2020). Effect of electrolyte temperature on properties of nickel film coated onto copper alloy fabricated by electroplating. *E-Journal of Surface Science and Nanotechnology*, 18(10), 1–8. <https://doi.org/10.1380/EJSSNT.2020.223>
- Syamsuir, Kusumah, R. S., Premono, A., Lubi, A., Soegijono, B., Yudanto, S. D., Ajiriyanto, M. K., Ismarwanti, S., Kriswarini, R., Rosyidan, C., Nanto, D., Basori, & Susetyo, F. B. (2024). Spinning Effect of Barreling Plating on Physical Properties and Electrochemical Behavior of Copper Layers. *E-Journal of Surface Science and Nanotechnology*, 22(2), 1–9. <https://doi.org/10.1380/ejsnt.2024-003>
- Syamsuir, Susetyo, F. B., Soegijono, B., Yudanto, S. D., Basori, Ajiriyanto, M. K., Edbert, D., Situmorang, E. U. M., Nanto, D., & Rosyidan, C. (2023). Rotating-Magnetic-Field-Assisted Electrodeposition of Copper for Ambulance Medical

- Equipment. *Automotive Experiences*, 6(2), 1–13.
<https://doi.org/10.31603/ae.9067>
- Tian, Q. H., & Guo, X. Y. (2010). Electroless copper plating on microcellular polyurethane foam. *Transactions of Nonferrous Metals Society of China (English Edition)*, 20(SUPPL.1), 283–287. [https://doi.org/10.1016/S1003-6326\(10\)60057-X](https://doi.org/10.1016/S1003-6326(10)60057-X)
- Toifur, M., A. N., Okimustava, & Sukarelawan, I. (2017). Toifur, 2017. *Jurnal Material dan Energi Indonesia*, 1.
<https://doi.org/https://doi.org/10.24198/jmei.v7i02.16132>
- Topayung, D. (2011). PENGARUH ARUS LISTRIK DAN WAKTU PROSES TERHADAP KETEBALAN DAN MASSA LAPISAN YANG TERBENTUK PADA PROSES ELEKTROPLATING PELAT BAJA EFFECT OF ELECTRIC CURRENT AND PROCESS TIME THE THICKNESS AND MASS LAYER FORMED ON ELECTROPLATING PROCESS STEEL PLATES. *Jurnal Ilmiah Sains*, (1), 97–101.
<https://doi.org/https://doi.org/10.35799/jis.11.1.2011.50>
- Tylecote, R. F. (1992). *HISTORY OF METALLURGY 2nd Edition* (2nd ed.). Antony Rowe Ltd.
- Wahab, H. A., Noordin, M. Y., Izman, S., & Kurniawan, D. (2013). Quantitative analysis of electroplated nickel coating on hard metal. *The Scientific World Journal*, 2013, 1. <https://doi.org/10.1155/2013/631936>
- Wery, M., Catonne Â, J. C., Ligier, V., & Pagetti, J. (1999). Zinc barrel electroplating using low cyanide electrolytes. *Journal of Applied Electrochemistry*, 1. <https://doi.org/https://doi.org/10.1023/A:1003579321625>
- Wilcox, G. D., & Gabe, D. R. (1992). Faraday's Laws of Electrolysis. *Transactions of the IMF*, 70(2), 1–3. <https://doi.org/10.1080/00202967.1992.11870951>