DAFTAR PUSTAKA

[1] R. Buckingham, T. Asset, and P. Atanassov, "Aluminum-air batteries: A review of alloys, electrolytes and design," Jun. 30, 2021, *Elsevier B.V.* doi: 10.1016/j.jpowsour.2021.229762.

[2] M. F. Gaele, P. Gargiulo, and T. M. Di Palma, "Eco-Sustainable Aluminum-Air Batteries," *Anal. Lett.*, vol. 58, no. 11, pp. 1744–1761, 2025, doi: 10.1080/00032719.2024.2345745;SUBPAGE:STRING:ACCESS.

[3] M. Jiang *et al.*, "Challenges and Strategies of Low-Cost Aluminum Anodes for High-Performance Al-Based Batteries," Jan. 01, 2022, *John Wiley and Sons Inc*. doi: 10.1002/adma.202102026.

[4] P. Goel, D. Dobhal, and R. C. Sharma, "Aluminum–air batteries: A viability review," Apr. 01, 2020, *Elsevier Ltd*. doi: 10.1016/j.est.2020.101287.

[5] M. BING, F. MO, and Z. HU, "Electrochemical Performance of SiC Composite Anode in Aluminum-Air Battery," *Electrochemistry*, vol. 88, no. 6, pp. 525–531, Nov. 2020, doi: 10.5796/electrochemistry.20-00064.

[6] P. Wu, S. Wu, D. Sun, Y. Tang, and H. Wang, "A Review of Al Alloy Anodes for Al–Air Batteries in Neutral and Alkaline Aqueous Electrolytes," Mar. 01, 2021, *Chinese Society of Metals*. doi: 10.1007/s40195-020-01140-x.

[7] V. Goel, D. Montiel, and K. Thornton, "Understanding the Effect of Electrochemical Properties and Microstructure on the Microgalvanic Corrosion of Mg Alloys via Phase-Field Simulations," *J. Electrochem. Soc.*, vol. 170, no. 10, p. 101502, Oct. 2023, doi: 10.1149/1945-7111/acf78e.

[8] T. Kikuchi, K. Miyamoto, and M. Iwai, "Electrochemical Separation of Porous Anodic Aluminum Oxide with Thick Barrier Layers," *J. Electrochem. Soc.*, vol. 170, no. 7, p. 073504, Jul. 2023, doi: 10.1149/1945-7111/ace558.

[9] R. B. Sitanggang, S. Nur'aini, W. Widiyastuti, T. Nurtono, and H. Setyawan, "Anodization – Deposition of aluminum alloy 6061 as the potential anode

material for aluminum air battery," *Next Materials*, vol. 9, Oct. 2025, doi: 10.1016/j.nxmate.2025.101170.

[10] L. Tian, Z. Li, P. Wang, X. Zhai, X. Wang, and T. Li, "Carbon quantum dots for advanced electrocatalysis," Apr. 01, 2021, *Elsevier B.V.* doi: 10.1016/j.jechem.2020.06.057.

[11] H. Khatoon, S. Iqbal, and S. Ahmad, "Influence of carbon nanodots encapsulated polycarbazole hybrid on the corrosion inhibition performance of polyurethane nanocomposite coatings," *New Journal of Chemistry*, vol. 43, no. 26, pp. 10278–10290, 2019, doi: 10.1039/c9nj01671f.

[12] A. K. Keerthana and P. M. Ashraf, "Carbon nanodots synthesized from chitosan and its application as a corrosion inhibitor in boat-building carbon steel BIS2062," *Applied Nanoscience (Switzerland)*, vol. 10, no. 4, pp. 1061–1071, Apr. 2020, doi: 10.1007/s13204-019-01177-0.

[13] R. Mori, "Recent Developments for Aluminum–Air Batteries," Jun. 01, 2020, *Springer Science and Business Media B.V.* doi: 10.1007/s41918-020-00065-4.

[14] B. Rani, J. K. Yadav, P. Saini, A. P. Pandey, and A. Dixit, "Aluminum-air batteries: current advances and promises with future directions," Jun. 03, 2024, *Royal Society of Chemistry*. doi: 10.1039/d4ra02219j.

[15] S. Li, Z. Liu, X. Wei, H. Wu, H. Mei, and J. Liu, "Advanced Strategies for Suppressing the Self-Corrosion of the Anode in Al–Air Batteries," Jul. 01, 2025, *Multidisciplinary Digital Publishing Institute (MDPI)*. doi: 10.3390/met15070760.

[16] T. Ma *et al.*, "Revisiting the Corrosion of Aluminum Current Collector in Lithium-Ion Batteries."

[17] G. S. Peng, J. Huang, Y. C. Gu, and G. S. Song, "Self-corrosion, electrochemical and discharge behavior of commercial purity Al anode via Mn modification in Al-air battery," *Rare Metals*, vol. 40, no. 12, pp. 3501–3511, Dec. 2021, doi: 10.1007/s12598-020-01687-9.

[18] A. Gabryelczyk, S. Ivanov, A. Bund, and G. Lota, “Corrosion of aluminium current collector in lithium-ion batteries: A review,” *J. Energy Storage*, vol. 43, p. 103226, Nov. 2021, doi: 10.1016/j.est.2021.103226.

[19] D. Krastev, “3 Improvement of Corrosion Resistance of Steels by Surface Modification.” [Online]. Available: www.intechopen.com

[20] W. Lee and S. J. Park, “Porous anodic aluminum oxide: Anodization and templated synthesis of functional nanostructures,” Aug. 13, 2014, *American Chemical Society*. doi: 10.1021/cr500002z.

[21] C. Ma *et al.*, “High Ion-Conducting Solid-State Composite Electrolytes with Carbon Quantum Dot Nanofillers,” *Advanced Science*, vol. 5, no. 5, May 2018, doi: 10.1002/advs.201700996.

[22] Y. C. Lin *et al.*, “Advancing Nanopore Technology: Anodic Aluminum Oxide Membranes with Anisotropic Pores through Controlled Stretching for Applications in Nanopatterning,” *ACS Appl. Nano Mater.*, vol. 7, no. 12, pp. 14707–14718, Jun. 2024, doi: 10.1021/acsanm.4c02257.

[23] A. M. Rheima *et al.*, “Aluminum oxide nano porous: Synthesis, properties, and applications,” *Case Studies in Chemical and Environmental Engineering*, vol. 8, Dec. 2023, doi: 10.1016/j.cscee.2023.100428.

[24] F. Ridwan, D. Dahlan, D. Agusta, and M. A. Husin, “Influence of Aluminium Anode Nanostructure on Ionic Conductivity and Battery Capacity,” *International Journal of Energy Production and Management*, vol. 10, no. 1, pp. 51–59, Mar. 2025, doi: 10.18280/ijepm.100106.

[25] M. P. Martínez-Viademonte, S. T. Abrahami, T. Hack, M. Burchardt, and H. Terryn, “A review on anodizing of aerospace aluminum alloys for corrosion protection,” Nov. 01, 2020, *MDPI AG*. doi: 10.3390/coatings10111106.

[26] S. Nagaoka, K. Yoshida, Y. Hirota, Y. Komachi, M. Takafuji, and H. Ihara, “Functionalized aluminum oxide by immobilization of totally organic aromatic polymer spherical nanoparticles,” *Colloids Surf. A Physicochem. Eng. Asp.*, vol. 640, May 2022, doi: 10.1016/j.colsurfa.2022.128438.

[27] Z. Li *et al.*, “Single Li ion conducting solid-state polymer electrolytes based on carbon quantum dots for Li-metal batteries,” *Nano Energy*, vol. 82, Apr. 2021, doi: 10.1016/j.nanoen.2020.105698.

[28] H. Li and H. Zhou, “Enhancing the performances of Li-ion batteries by carbon-coating: Present and future,” *Chemical Communications*, vol. 48, no. 9, pp. 1201–1217, Jan. 2012, doi: 10.1039/c1cc14764a.

[29] F. Ridwan, G. Renardy, D. B. Agusto, and D. Darwison, “Enhanced ion transport in CNT-doped PVA/HCl/TEOS electrolyte membranes for aluminium-air batteries,” *Mater. Sci. Energy Technol.*, vol. 9, pp. 1–13, Jan. 2026, doi: 10.1016/j.mset.2025.12.001.

[30] F. Ridwan, D. Dahlan, D. Agusta, and M. A. Husin, “Influence of Aluminium Anode Nanostructure on Ionic Conductivity and Battery Capacity,” *International Journal of Energy Production and Management*, vol. 10, no. 1, pp. 51–59, Mar. 2025, doi: 10.18280/ijepm.100106.

[31] K. W. Song, R. Costi, and V. Bulovič, “Electrophoretic deposition of CdSe/ZnS quantum dots for light-emitting devices,” *Advanced Materials*, vol. 25, no. 10, pp. 1420–1423, Mar. 2013, doi: 10.1002/adma.201203079.

[32] S. J. An *et al.*, “Thin film fabrication and simultaneous anodic reduction of deposited graphene oxide platelets by electrophoretic deposition,” *Journal of Physical Chemistry Letters*, vol. 1, no. 8, pp. 1259–1263, Apr. 2010, doi: 10.1021/jz100080c.

[33] C. J. Wang, P. Kusdiyarto, and Y. H. Li, “Potentiodynamic polarization analysis with various corrosion inhibitors on A508/IN-182/IN-52M/308L/316L welds,” *Kuwait Journal of Science*, vol. 51, no. 2, Apr. 2024, doi: 10.1016/j.kjs.2024.100202.

[34] A. J. . Bard and L. R. . Faulkner, *Electrochemical methods : fundamentals and applications*. John Wiley & Sons, Inc., 2001.

[35] H.-M. Cho, Y. J. Park, and H.-C. Shin, “Semiempirical Analysis of Time-Dependent Elementary Polarizations in Electrochemical Cells,” *J. Electrochem. Soc.*, vol. 157, no. 1, p. A8, 2010, doi: 10.1149/1.3246525.

[36] T. A. Salgueiro, R. C. Veloso, J. Ventura, F. Danzi, and J. Oliveira, “Ionic Conductivity Analysis of NASICON Solid Electrolyte Coated with Polyvinyl-Based Polymers,” *Batteries*, vol. 10, no. 5, May 2024, doi: 10.3390/batteries10050157.

[37] “Electrochemical Impedance Spectroscopy EIS.” [Online]. Available: https://www.novocontrol.de/php/intro_eis.php

[38] “Understanding the Behavior of Supercapacitor Materials via Electrochemical Impedance Spectroscopy: A Review.” [Online]. Available: https://onlinelibrary.wiley.com/doi/10.1002/tcr.202400007

[39] J. C. Barbosa *et al.*, “Metal-organic frameworks and zeolite materials as active fillers for lithium-ion battery solid polymer electrolytes,” *Mater. Adv.*, vol. 2, no. 12, pp. 3790–3805, Jun. 2021, doi: 10.1039/D1MA00244A.

[40] “Potentiostat/Galvanostat Electrochemical Instrument Basics Gamry Instruments.” Accessed: Dec. 29, 2025. [Online]. Available: https://www.gamry.com/application-notes/instrumentation/potentiostat-fundamentals/

[41] C. J. Wang, P. Kusdiyarto, and Y. H. Li, “Potentiodynamic polarization analysis with various corrosion inhibitors on A508/IN-182/IN-52M/308L/316L welds,” *Kuwait Journal of Science*, vol. 51, no. 2, Apr. 2024, doi: 10.1016/j.kjs.2024.100202.

[42] “ASTM_G102_Standard_Practice”.

[43] J. Li, H. Wei, K. Zhao, M. Wang, D. Chen, and M. Chen, “Effect of anodizing temperature and organic acid addition on the structure and corrosion resistance of anodic aluminum oxide films,” *Thin Solid Films*, vol. 713, Nov. 2020, doi: 10.1016/j.tsf.2020.138359.

[44] L. González-Rovira, L. González-Souto, P. Astola, C. Bravo-Benítez, and F. J. Botana, “Assessment of the corrosion resistance of self-ordered anodic aluminum oxide (AAO) obtained in tartaric-sulfuric acid (TSA),” 2020.

[45] X. Liu, J. Li, S. Li, C. He, and H. He, “Carbon Dots for Corrosion Protection: A Systematic Review of Applications and Mechanisms,” Apr. 01, 2026, *Multidisciplinary Digital Publishing Institute (MDPI)*. doi: 10.3390/nano16080488.

[46] N. R. Dhongde, N. K. Das, T. Banerjee, and P. V. Rajaraman, “Synthesis of carbon quantum dots from rice husk for anti-corrosive coating applications: Experimental and theoretical investigations,” *Ind. Crops Prod.*, vol. 212, Jun. 2024, doi: 10.1016/j.indcrop.2024.118329.

[47] M. Shaker *et al.*, “Carbon/graphene quantum dots as electrolyte additives for batteries and supercapacitors: A review,” Apr. 30, 2024, *Elsevier Ltd*. doi: 10.1016/j.est.2024.111040.

[48] K. W. Sung, K. H. Kim, and H. J. Ahn, “Carbon quantum dot-laminated stepped porous Al current collector for stable and ultrafast lithium-ion batteries,” *Int. J. Energy Res.*, vol. 46, no. 7, pp. 8989–8999, Jun. 2022, doi: 10.1002/ER.7776;JOURNAL:JOURNAL:1099114X;ISSUE:ISSUE:DOI.

[49] K. J. Nelson, G. L. d’Eon, A. T. B. Wright, L. Ma, J. Xia, and J. R. Dahn, “ Studies of the Effect of High Voltage on the Impedance and Cycling Performance of Li[Ni 0.4 Mn 0.4 Co 0.2]O 2 /Graphite Lithium-Ion Pouch Cells ,” *J. Electrochem. Soc.*, vol. 162, no. 6, pp. A1046–A1054, 2015, doi: 10.1149/2.0831506jes.