

Refereed Journal Articles Published

1. N. Anjum, M. M. Rahman, A. Elattar, A. Sijuade, E. E. Kalu, O. I. Okoli, "High-Yield MILD synthesis of Ti₃C₂T_x MXene: Characterization and Application in Developing Energy Storage Device", *Advanced Sustainable Systems* 2500402 (2025) <https://doi.org/10.1002/adsu.202500402>
2. V. Watson, Y. D. Yeboah, M. H. Weatherspoon, E. E. Kalu, "Free-Standing and Binder-Free Porous Carbon Cloth (C-Felt) Anodes for Lithium-Ion Full Batteries", *Batteries* 11 (3), 111 (2025).
3. C. I. Azambou, O. O. Obiukwu, P. K. Tsobnang, I. T. Kenfack, E. E. Kalu, E. E. Oguzie, "Electrochemical performance and structural evolution of layered oxide cathodes materials for sodium-ion batteries: A review", *Journal of Energy Storage* **94**, 112506 (2024) <https://doi.org/10.1016/j.est.2024.112506>
4. C. I. Azambou, P. K. Tsobnang, O. O. Obiukwu, I. T. Kenfack, E. E. Kalu, E. E. Oguzie, "First-principles study of the titanium-doping effects on the properties of O3-type NaNi_{0.25}Fe_{0.25}Mn_{0.5}O₂ cathode material for sodium-ion batteries", *J. Solid State Chem.* **335**, 124705 (2024) <https://doi.org/10.1016/j.jssc.2024.124705>
5. U. Onyeka, E. Kalu, D. Okafor, "Potential of Lignocellulosic Agro-Waste to Produce Value-Added Products", *MDPI Proceedings*, **91** (1) 127 (2023) doi.org/10.3390/proceedings202309112
6. R. E. Gordon, **E. E. Kalu**, A. R. Adetunji, D. Campbell, P. N. Kalu, "The Effect of the Environment on the Case Hardening Characteristics of AISI 1018 Steel during Cassava Leaf Pack Cyaniding", *Alloys* **3** (1), 1-14 (2023)
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8. I. S. Ike, S. E. Iyuke, E. E. Kalu, "Comparative Studies of Solutions of Homogeneous Electrochemical Capacitors Models", *J. Energy Storage*, **35**, 102221 (2021)
9. W. Chaitree, **E. E. Kalu**, Z. Liang, Y. D. Yeboah, "Effects of bath composition and thermal treatment on the performance of Co-Ni-Mo-P electrocatalyst supported on carbon for the electro-oxidation of ethanol", *J. Alloys & Compounds*, **860**, (4) 158404 (2021), doi.org/10.1016/j.jallcom.2020.158404
10. U. Onyeka, D. Ukaero, E. Kalu, "Potential Health Threat due to Migration of Lead and Aluminum into Food Cooked with Recycled Metal and Alloy Pots", *Current Developments in Nutrition*, Vol. 4, Issue Supplement_2, June 2020, Page 769, https://doi.org/10.1093/cdn/nzaa052_038
11. L. S. Ochonogor, V. E. Efevbokhan, J. Sankar, E. E. Kalu, "Oxidation of Glycerol with Oxygen Molecules as the Oxidant over Activated Clay Material Catalysts", *Journal of Physics: Conference Series* **1378** (3), 032036 (2019)
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16. A. Shellikeri, V. Watson, D. Adams, **E. E. Kalu**, J. R. Read, T. R. Jow, J. S. Zheng, J. P. Zheng, "Investigation of Pre-Lithiation in Graphite and Hard Carbon Anodes Using Different Lithium Source Structures", *J. Electrochem. Soc.* **164** (14), A3914 – A3924 (2017)
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4. E. E. Kalu, W. Chaitree*, Effect of Heat Treatment and Bath Compositions on the Performance of Co-Ni-Mo-P Electrocatalysts for Ethanol Electro-Oxidation ECS Meeting Abstracts, **30**, pp. 1529-1529 (2019)
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