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RESEARCH

Interests	GIS · 3D Laser Scanning · Close range photogrammetry
Areas	Global and Planetary Change · Environmental Engineering · Ecology · Atmospheric Science · Management, Monitoring, Policy and Law · Waste Management and Disposal

RESEARCH SUMMARY

52	1,549	20	29	2.18	26%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 52 publications listed below, 2003–2025. Field-weighted impact is the mean over the 31 works scored for it; 1.00 is the world average for works of the same field, type and year. 8 of the 31 papers scored for it are among the world's most cited tenth for their field, type and year.

PUBLICATIONS

Journal articles 47

1. Ernest Biney, **Eric Kwabena Forkuo**, Michael Poku-Boansi, Yaw Mensah Asare, Kwame O. Hackman, Daniel Buston Yankey, Albert Elikplim Agbenorhevi, Ernestina Annan (2024). A comprehensive analysis and future projection of land use and land cover dynamics in a fast-growing city: A case study of Sekondi-Takoradi metropolis, Ghana. *Scientific African*. https://doi.org/10.1016/j.sciaf.2024.e02207
2. Ernest Biney, **Eric Kwabena Forkuo**, Michael Poku-Boansi, Kwame O. Hackman, Emmanuel Harris, Yaw Mensah Asare, Daniel Buston Yankey, Ernestina Annan, Albert Elikplim Agbenorhevi (2024). Analyzing the spatio-temporal pattern of urban growth and its influence on urban heat islands in the Sekondi-Takoradi metropolis, Ghana. *Scientific African*. https://doi.org/10.1016/j.sciaf.2024.e02366
3. Ernest Biney, **Eric Kwabena Forkuo**, Michael Poku-Boansi, Yaw Mensah Asare (2024). Geospatial assessment of urban sprawl in Sekondi-Takoradi Metropolis, Ghana from 1991 to 2023. *African Geographical Review*. https://doi.org/10.1080/19376812.2024.2334726
4. **EK Forkuo** (2024). Improving Flood Hazard Mapping in Rural Landscapes Using Sentinel-2, ICESat-2, and Deep Learning: A Case Study of Nasia Watershed, Ghana. *AGU24*. https://scholar.google.com/scholar?cluster=18236594412585303186&hl=en&oi=scholarr
5. Adubofour Frimpong, **Eric Kwabena Forkuo**, Edward Matthew Osei Jnr (2024). The effect of land use land cover types on MODIS land surface temperature in Ghana. *Cogent Engineering*. https://doi.org/10.1080/23311916.2024.2411865
6. Adubofour Frimpong, **Eric Kwabena Forkuo**, Edward Matthew Osei (2023). A comparative estimate of air temperature from modis land surface temperatures in Ghana. *Cogent Engineering*. https://doi.org/10.1080/23311916.2023.2216047
7. **EK Forkuo**, JA Quaye-Ballard, P Opoku (2023). Land use land cover changes in the Densu river Basin of Ghana From 1991 To 2020. *Journal of Science and Technology*. https://journal.knust.edu.gh/index.php/just/article/view/1463
8. Ernest Biney, Nathaniel Biney, Isaac Dadzie, Emmanuel Harris, Gladys Ama Quartey, Yaw Mensah Asare, Enoch Bessah, **Eric Kwabena Forkuo** (2022). Impact of mining on vegetation cover: A case study of

Prestea Huni-Valley municipality. *Scientific African*. https://doi.org/10.1016/j.sciaf.2022.e01387

9. George Ashiagbor, Winston Adams Asante, **Eric Kwabena Forkuo**, Emmanuel Acheampong, Ernest Foli (2022). Monitoring cocoa-driven deforestation: The contexts of encroachment and land use policy implications for deforestation free cocoa supply chains in Ghana. *Applied Geography*. https://doi.org/10.1016/j.apgeog.2022.102788
10. George Ashiagbor, Winston Adams Asante, Jonathan Arthur Quaye-Ballard, **Eric Kwabena Forkuo**, Emmanuel Acheampong, Ernest Foli (2021). Mangrove mapping using Sentinel-1 data for improved decision support on sustainable conservation and restoration interventions in the Keta Lagoon Complex Ramsar Site, Ghana. *Marine and Freshwater Research*. https://doi.org/10.1071/mf20105
11. Emmanuel Daata kullo, **Eric Kwabena Forkuo**, Ernest Biney, Emmanuel Harris, Jonathan Arthur Quaye-Ballard (2021). The impact of land use and land cover changes on socioeconomic factors and livelihood in the Atwima Nwabiagya district of the Ashanti region, Ghana. *Environmental Challenges*. https://doi.org/10.1016/j.envc.2021.100226
12. George Ashiagbor, Richard Ofori-Asenso, **Eric K. Forkuo**, Seth Agyei-Frimpong (2020). Measures of geographic accessibility to health care in the Ashanti Region of Ghana. *Scientific African*. https://doi.org/10.1016/j.sciaf.2020.e00453
13. Alhassan Sulemana, **Eric Forkuo**, Evelyn Arthur, Kwame Agyei-gyamfi, Ebenezer Otchere-darko, Michael Ayaim (2020). Multi-Criteria Selection of Suitable Institutional Solid Waste Collection Sites: A Case of KNUST Campus, Kumasi, Ghana. *International Journal of Environment and Geoinformatics*. https://doi.org/10.30897/ijegeo.696335
14. Alhassan Sulemana, Emmanuel Amponsah Donkor, **Eric Kwabena Forkuo**, Juliet Asantewaa, Isabella N. A. Ankrah, Abdul Muhaymin O. Musah (2020). OPTIMIZED ROUTING OF TRUCKS FOR INSTITUTIONAL SOLID WASTE COLLECTION IN KUMASI, GHANA. *Detritus*. https://doi.org/10.31025/2611-4135/2020.13896
15. George Ashiagbor, **Eric K. Forkuo**, Winston A. Asante, Emmanuel Acheampong, Jonathan A. Quaye-Ballard, Prince Boamah, Yakubu Mohammed, Ernest Foli (2020). Pixel-based and object-oriented approaches in segregating cocoa from forest in the Juabeso-Bia landscape of Ghana. *Remote Sensing Applications Society and Environment*. https://doi.org/10.1016/j.rsase.2020.100349
16. **Eric K Forkuo**, B Arko-Boham, Elvis O Ameyaw, A Banunle, Robert P Biney, Evans Asenso, Isaac T Henneh, Ama K Thomford, Madison Adanusa (2020). Scientific African. *Carbon*. https://www.researchgate.net/profile/Hamza-Zine/publication/346551011_Guidelines_for_a_phytomanagement_plan_by_the_phytostabilization_of_mining_wastes/links/5fcfd13392851c00f85f0f28/Guidelines-for-a-phytomanagement-plan-by-the-phytostabilization-of-mining-wastes.pdf
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18. Yaw Mensah Asare, **Eric Kwabena Forkuo**, Gerald Forkuor, Michael Thiel (2019). Evaluation of gap-filling methods for Landsat 7 ETM+ SLC-off image for LULC classification in a heterogeneous landscape of West Africa. *International Journal of Remote Sensing*. https://doi.org/10.1080/01431161.2019.1693076
19. Alfred Awotwi, Geophrey Kwame Anornu, Jonathan Arthur Quaye-Ballard, Thompson Annor, **Eric Kwabena Forkuo**, Emmanuel Harris, Jacob Agyekum, John Lawer Terlabie (2019). Water balance responses to land-use/land-cover changes in the Pra River Basin of Ghana, 1986–2025. *CATENA*. https://doi.org/10.1016/j.catena.2019.104129
20. Benjamin Ghansah, **Eric Kwabena Forkuo**, Emmanuel Frimpong Osei, Richard Kofi Appoh, Mensah Yaw Asare, Nana Ama Browne Kluste (2018). Mapping the spatial distribution of small reservoirs in the White Volta Sub-basin of Ghana. *Remote Sensing Applications Society and Environment*. https://doi.org/10.1016/j.rsase.2017.12.003
21. Alhassan Sulemana, Emmanuel A. Donkor, **Eric K. Forkuo**, Sampson Oduro-Kwarteng (2018). Optimal

Routing of Solid Waste Collection Trucks: A Review of Methods. *Journal of Engineering*. https://doi.org/10.1155/2018/4586376

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28. Alfred Awotwi, Michael Asare Bediako, Emmanuel Harris, **Eric Kwabena Forkuo** (2016). Water Quality Changes Associated with Cassava Production: Case Study of White Volta Basin. *Heliyon*. https://doi.org/10.1016/j.heliyon.2016.e00149
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35. George Ashiagbor, **EK Forkuo** (2014). Modelling soil erosion in the densu river basin using RUSLE and GIS Tools. *Journal of Environmental Science & Engineering*. https://www.researchgate.net/profile/Eric-Kwabena-Forkuo/publication/297361158_Modelling_Soil_Erosion_in_the_Densu_River_Basin_Using_RUSLE_and_GIS_Tools/links/58f4ed40458515ff23b557ac/Modelling-Soil-Erosion-in-the-Densu-River-Basin-Using-RUSLE-and-GIS-Tools.pdf
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Reports 4

1. **EK Forkuo** (2025). Shared Socioeconomic Pathways: Are We on The Path to the Furture We Want. *WASCAL*. http://academia.wascal.org/handle/123456789/1228

2. **EK Forkuo**, M Poku-Boansi (2025). Urban Growth in Sekondi-Takoradi: A Call for Sustainable Land Use Planning. *WASCAL*. http://academia.wascal.org/handle/123456789/1239

3. WA Agyare, W Amponsah, **EK Forkuo**, A Opoku, E Quansah, E Bessah (2023). Soil Carbon Sequestration and Crop Production Course Module. *Accelerating Impacts of CGIAR Climate Research for Africa*. https://cgspace.cgiar.org/items/5eb719fa-2ddf-4dc7-983b-fbeecee48b74

4. **EK Forkuo** (2014). Land Suitability Assessment and Landuse Planning: A Prerequisite for Food Security and Climate Change Adaptation. *David Publishing*. https://scholar.google.com/scholar?cluster=10461223278024920631&hl=en&oi=scholarr

Theses 1

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