# Dr. Matthew B Kursah

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## RESEARCH

| | |
|---|---|
| Interests | Remote Sensing · GIS · Spatial Planning and Environmental Management |
| Areas | Waste Management and Disposal · Building and Construction · Economics and Econometrics · Environmental Engineering · Health, Toxicology and Mutagenesis · Management, Monitoring, Policy and Law |

## RESEARCH SUMMARY

| 26 | 173 | 8 | 7 | 1.00 | 18% |
|---|---|---|---|---|---|
| Publications | Citations | h-index | i10-index | Field-weighted impact | World top 10% |

Counted from the 26 publications listed below, 2009–2026. Field-weighted impact is the mean over the 17 works scored for it; 1.00 is the world average for works of the same field, type and year. 3 of the 17 papers scored for it are among the world's most cited tenth for their field, type and year.

## POSITIONS

**Senior Lecturer** 2014–present
Geography, University of Education Winneba, Box 25, Winneba, Ghana

## PUBLICATIONS

### Journal articles 19

1. **Matthew Biniyam Kursah**, Isaac Appiah-Otoo, Faith Umborja Umborgati (2026). Modelling the Relationship Between COVID-19 Vaccination and Cases/Deaths: Evidence from a Large Panel of Countries. *Ghana Journal of Geography*. https://doi.org/10.4314/gjg.v18i1.1
2. Isaac Appiah-Otoo, Xudong Chen, **Matthew Biniyam Kursah** (2023). Modelling the impact of renewable energy investment on global carbon dioxide emissions. *Energy Reports*. https://doi.org/10.1016/j.egyr.2023.10.043
3. **Matthew Biniyam Kursah** (2023). Satellite image analysis of thermal comfort for a sustainable urban ecology of Winneba, Ghana. *Urban Climate*. https://doi.org/10.1016/j.uclim.2023.101685
4. Tarawally, Ansumana, Tarawally, Musa, **Kursah, Matthew B**, Conteh, Samuel Gbassay, Ndenema, Tamba Brima (2023). The Impacts of Control Measures on Air Pollution Trends in Sichuan Province, China. *DergiPark (Istanbul University)*.
5. Koffi Dumor, Yao Li, Edem koffi Amouzou, Enock Mintah Ampaw, **Matthew Biniyam Kursah**, Koffi Akakpo (2022). Modeling the dynamic nexus among CO2 emissions, fossil energy usage, and human development in East Africa: new insight from the novel DARDL simulation embeddedness. *Environmental Science and Pollution Research*. https://doi.org/10.1007/s11356-022-19546-8
6. **Matthew Biniyam Kursah**, Yong Wang, Henry David Bayoh, Musa Tarawally (2021). A comparative study on the predictive ability of archived and SBAS-InSAR inventories for landslide susceptibility using frequency ratio model in Western Area, Sierra Leone. *Environmental Earth Sciences*. https://doi.org/10.1007/s12665-021-09663-x
7. Musa Tarawally, Wenbo Xu, **Matthew Biniyam Kursah**, Augustine Bai Kamara (2021). Intra-seasonal

variations in urban land surface temperature in two cities in Sierra Leone: the challenge of using a single-date image to represent a whole season. *Spatial Information Research*. https://doi.org/10.1007/s41324-021-00404-7

8. Isaac Appiah-Otoo, **Matthew Biniyam Kursah** (2021). Modelling spatial variations of novel coronavirus disease (COVID-19): evidence from a global perspective. *GeoJournal*. https://doi.org/10.1007/s10708-021-10427-0
9. Ramatu Agana Amoah, **Matthew Biniyam Kursah** (2019). Geospatial analysis of landfill site selection perspectives using geographic information systems in Bongo district, Ghana. *SN Applied Sciences*. https://doi.org/10.1007/s42452-019-1273-y
10. Musa Tarawally, Xu Wenbo, Hou Weiming, Terence Darlington Mushore, **Matthew Biniyam Kursah** (2019). Land use/land cover change evaluation using land change modeller: A comparative analysis between two main cities in Sierra Leone. *Remote Sensing Applications Society and Environment*. https://doi.org/10.1016/j.rsase.2019.100262
11. **Matthew Biniyam Kursah**, Anthony Baabereyir (2019). Willingness to pay for sachet water plastic waste management through deposit-refund system. *International Journal of Environment and Waste Management*. https://doi.org/10.1504/ijewm.2019.097612
12. Anthony Baabereyir, **Matthew Biniyam Kursah** (2018). Willingness to pay for sachet water plastic waste management through deposit-refund system. *International Journal of Environment and Waste Management*. https://doi.org/10.1504/ijewm.2019.10018022
13. **Matthew Biniyam Kursah** (2017). A quantitative methodology for assessing sustainable tourism potentials. *Tourism Review International*. https://www.ingentaconnect.com/content/cog/tri/2017/00000021/00000001/art00006
14. **Matthew Biniyam Kursah** (2017). GIS and correlation analysis of geo-environmental variables influencing malaria prevalence in the Saboba district of Northern Ghana. *Ghana Journal of Geography*.
15. **Matthew Biniyam Kursah** (2017). Least-Cost Pipeline using Geographic Information System. *International Journal of Applied Geospatial Research*. https://doi.org/10.4018/ijagr.2017070101
16. **Matthew Biniyam Kursah** (2017). Resolving the landfill siting impasse: modelling technocratic and indigenous perspectives using GIS multicriteria approach. *GeoJournal*. https://doi.org/10.1007/s10708-017-9796-5
17. **Matthew Biniyam Kursah** (2016). Modelling malaria susceptibility using geographic information system. *GeoJournal*. https://doi.org/10.1007/s10708-016-9732-0
18. **Matthew Biniyam Kursah** (2014). Geo-environmental assessment to identify a least-cost road in Ghana. *Applied GIS*. https://www.researchgate.net/profile/Matthew_Kursah/publication/264810761_Geo-environmental_assessment_to_identify_a_least-cost_road_in_Ghana/links/569286b208aec14fa55d7bb0/Geo-environmental-assessment-to-identify-a-least-cost-road-in-Ghana.pdf?origin=journalDetail&_tp=eyJwYWdlIjoiam91cm5hbERldGFpbCJ9
19. **Matthew Biniyam Kursah** (2013). Application of GIS in flood detection for road infrastructure planning in north-eastern corridor of Northern Ghana. *International Journal of Applied Science and Technology*. https://scholar.google.com/scholar?cluster=10458585056326536708&hl=en&oi=scholarr

### Book chapters 3

1. Hansen Owusu Tawiah, **Matthew Biniyam Kursah**, Diana Yinime (2026). Integrating Education for Sustainable Development in Teacher Training Curricula: A Comparative Analysis of Finland and Ghana. *World sustainability series*. https://doi.org/10.1007/978-3-032-22146-9_10
2. **Matthew B. Kursah** (2023). Analysing landcover and green cover change in Winneba using remote sensing and geospatial techniques. *Winneba: The Geography, Peoples and Systems*. https://www.researchgate.net/profile/Matthew_Kursah/publication/369950129_Analysing_landcover_and_green_cover_change_in_Winneba_using_remote_sensing_and_geospatial_techniques/links/64368566ad9b6d17dc52e926/Analysing-landcover-and-green-cover-change-in-Winneba-using-remote-sensing-and-geospatial-techniques.pdf

3. **Matthew B. Kursah** (2023). The economic history of Winneba. *Winneba: The Geography, Peoples and Systems*.

### Conference papers 3

1. **Matthew B. Kursah** (2025). FasterR-CNN for Urban Tree Detection and Enumeration Using Optical R G B: Insights and Limitations from a City Scale Experimentation. *American Geophysical Union (AGU)*.
2. **Matthew Biniyam Kursah** (2019). Landslide inventory using InSAR and ancillary datasets for susceptibility in Western Area, Sierra Leone. *IGARSS 2019-2019 IEEE International Geoscience and Remote Sensing Symposium*. https://ieeexplore.ieee.org/abstract/document/8898702/
3. **Matthew Biniyam Kursah** (2019). Small baseline subset Interferometric SAR technique for spatiotemporal analysis of the regent landslides, Sierra Leone. *IGARSS 2019-2019 IEEE International Geoscience and Remote Sensing Symposium*. https://ieeexplore.ieee.org/abstract/document/8899096/

### Reports 1

1. **Matthew Biniyam Kursah** (2009). Water sources, infrastructure, space and the dynamics of environmental diseases in Saboba district, Northern Ghana: Using GIS. *Skolan för arkitektur och samhällsbyggnad*. https://scholar.google.com/scholar?cluster=6139091382423811802&hl=en&oi=scholarr