# Ernest Kofi Amankwa Afrifa

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## RESEARCH

| | |
|---|---|
| Interests | Environmental Science · Soil Microbiology · Impact Assessment · Water Quality |
| Areas | Global and Planetary Change · Management, Monitoring, Policy and Law · Pollution · Waste Management and Disposal · Building and Construction · Renewable Energy, Sustainability and the Environment |

## RESEARCH SUMMARY

| 29 | 1,034 | 12 | 15 | 1.91 | 30% |
|---|---|---|---|---|---|
| Publications | Citations | h-index | i10-index | Field-weighted impact | World top 10% |

Counted from the 29 publications listed below, 2010–2026. Field-weighted impact is the mean over the 20 works scored for it; 1.00 is the world average for works of the same field, type and year. 6 of the 20 papers scored for it are among the world's most cited tenth for their field, type and year.

## PUBLICATIONS

### Journal articles 28

1. Edward Kweku Nunoo, Emmanuella Lockner, **Ernest Amankwah Afrifa**, Joseph Essandoh-Yeddu, Eric Twum, Bernice Essien, Johnie Nyametso, Clement Oteng, Joseph Asafo, Emmanuel Amankwa, Philomina Kwabena (2026). Safety preparedness in the oil and gas industry: A psychological assessment of factors affecting employee intentions and behaviors toward emergency response. *Progress in Disaster Science*. https://doi.org/10.1016/j.pdisas.2026.100534
2. **Ernest Amankwa Afrifa** (2026). Spatial Structure of Soil Physicochemical Properties and Implications for Site-Specific Management in the Semi-Deciduous Forest Zone of Ghana. *Soil Advances*. https://www.sciencedirect.com/science/article/pii/S295028962600014X
3. Abdul-Rahaman Afitiri, **Ernest Kofi Amankwa Afrifa** (2025). Barriers and Challenges in the Implementation of Decentralized Solar Water Disinfection Treatment Systems—A Case of Ghana. *Solar*. https://doi.org/10.3390/solar5020025
4. Isaac Mbir Bryant, Francis Kumi, Richard Arthur, Christina Fobir, Nancy Baka, Adwoba Edjah, **Ernest Kofi Amankwa Afrifa** (2025). The use of solar-heated biogas digester for treating agricultural wastes: a review. *Journal of the Ghana Institution of Engineering (JGhIE)*. https://doi.org/10.56049/jghie.v25i3.354
5. Abdul-Rahaman Afitiri, **Ernest Kofi Amankwa Afrifa**, Marion Martienssen (2025). Understanding the Potential of Mixed Photocatalysis for Optimization of Water Disinfection. *Pollutants*. https://doi.org/10.3390/pollutants5020013
6. Andoh Kwaku Amponsah, **Ernest Amankwa Afrifa**, Paul Kwame Essandoh, Christian Ebere Enyoh (2024). Evidence of microplastics accumulation in the gills and gastrointestinal tract of fishes from an estuarine system in Ghana. *Heliyon*. https://doi.org/10.1016/j.heliyon.2024.e25608
7. Abdul-Rahaman Afitiri, **Ernest Kofi Amankwa Afrifa** (2024). Households' Willingness to Use Water from a Solar Water Disinfection Treatment System for Household Purposes. *World*. https://doi.org/10.3390/world5040060
8. Andoh Kwaku Amponsah, **Ernest Kofi Amankwa Afrifa**, Paul Kwame Essandoh (2024). Plastic in the food chain: Investigating microplastic consumption by the blue-swimming crab (de Rochebrune, 1883) and

shrimp (Pérez-Farfante, 1967) from an estuarine system in Ghana. *Scientific African*. https://doi.org/10.1016/j.sciaf.2024.e02261

9. Rogers Kipkoech, Mohammed Takase, **Ernest Kofi Amankwa Afrifa** (2022). Renewable Energies in Ghana in Relation to Market Condition, the Environment, and Food Security. *Journal of Renewable Energy*. https://doi.org/10.1155/2022/8243904
10. Mohammed Takase, Rogers Kipkoech, Paul Kwame Essandoh, **Ernest Amankwa Afrifa**, Jones Agyapong Frimpong, Heindel Kwasi Agama-Agbanu (2021). Status of biodiesel research and development in Kenya. *International Journal of Green Energy*. https://doi.org/10.1080/15435075.2021.1947823
11. Bernard Ekumah, Frederick Ato Armah, **Ernest K. A. Afrifa**, Denis Worlanyo Aheto, Justice Odoiquaye Odoi, Abdul-Rahaman Afitiri (2020). Assessing land use and land cover change in coastal urban wetlands of international importance in Ghana using Intensity Analysis. *Wetlands Ecology and Management*. https://doi.org/10.1007/s11273-020-09712-5
12. Bernard Ekumah, Frederick Ato Armah, **Ernest K.A. Afrifa**, Denis Worlanyo Aheto, Justice Odoiquaye Odoi, Abdul-Rahaman Afitiri (2020). Geospatial assessment of ecosystem health of coastal urban wetlands in Ghana. *Ocean & Coastal Management*. https://doi.org/10.1016/j.ocecoaman.2020.105226
13. Abdul-Rahaman Afitiri, Frederick Ato Armah, **Ernest K. A. Afrifa**, Bernard Ekumah (2020). The joint effect of natural and human-induced environmental factors on surface water quality in the Birim North District of Ghana. *Water Practice & Technology*. https://doi.org/10.2166/wpt.2020.046
14. Mohammed Takase, Alexander Nii Moi Pappoe, **Ernest Amankwa Afrifa**, Michael Miyittah (2018). High performance heterogeneous catalyst for biodiesel production from non-edible oil. *Renewable energy focus*. https://doi.org/10.1016/j.ref.2018.03.002
15. KA Frimpong, **EKA Afrifa**, EA Ampofo (2014). Plant litter turnover, soil chemical and physical properties in a Ghanaian gold-mined soil revegetated with Acacia species. *International Journal of Environmental Sciences*. https://indianjournals.com/article/ijes-4-5-046
16. KA Frimpong, **EKA Afrifa**, EA Ampofo (2014). Research article ISSN 0976–4402. *INTERNATIONAL JOURNAL OF ENVIRONMENTAL SCIENCES*. https://ir.ucc.edu.gh/server/api/core/bitstreams/7ad4d186-47d3-480b-85a3-2f5e9741ab6c/content
17. PK Essandoh, **E. K. A. Afrifa** (2012). Ecological health status of the Fosu Lagoon, Southern Ghana I: Biotic Assessment. *J Ecosyst Ecogr*. https://scholar.google.com/scholar?cluster=17865783262203958637&hl=en&oi=scholarr
18. Frederick A. Armah, Samuel Obiri, David O. Yawson, **Ernest K.A. Afrifa**, Genesis T. Yengoh, Johanna Alkan Olsson, Justice O. Odoi (2011). Assessment of legal framework for corporate environmental behaviour and perceptions of residents in mining communities in Ghana. *Journal of Environmental Planning and Management*. https://doi.org/10.1080/09640568.2010.505818
19. **EKA Afrifa**, FA Armah, ANM Pappoe, PK Essandoh (2011). Assessment of the quality of revegetated soil near an active goldmine in southwestern Ghana. *Int. J. Environ. Sci*. https://ir.ucc.edu.gh/items/274312aa-6ad8-4aab-a925-c2fd7391134a
20. Paul Kwame Essandoh, Frederick A. Armah, **Ernest K.A. Afrifa**, Alexander N. M. Pappoe (2011). Determination of Ambient Noise Levels and Perception of Residents in Halls at the University of Cape Coast, Ghana. *Environment and Natural Resources Research*. https://doi.org/10.5539/enrr.v1n1p181
21. Alex Nii Moi Pappoe, **EKA Afrifa**, Frederick A Armah (2011). Preliminary Assessment of Heavy Metal Distribution in the Soils of the University of Cape Coast Nature Reserve, Ghana. *International Journal of Applied*. https://www.academia.edu/download/7939404/4.pdf
22. FA Armah, **EKA Afrifa**, ANM Pappoe, PK Essandoh (2011). Spatial variability of trace metals in surface and groundwater within a Contaminated Mining Environment in Ghana. *Research Journal of Environmental and Earth Sciences*. https://www.airitilibrary.com/Article/Detail/20410492-201108-201507220021-201507220021-546-554
23. Frederick A. Armah, Samuel Obiri, David O. Yawson, Edward E. Onumah, Genesis T. Yengoh, **Ernest K. A. Afrifa**, Justice O. Odoi (2010). Anthropogenic sources and environmentally relevant concentrations of heavy metals in surface water of a mining district in Ghana: a multivariate statistical approach. *Journal of*

*Environmental Science and Health Part A*. https://doi.org/10.1080/10934529.2010.513296

24. Frederick A. Armah, Justice O. Odoi, Genesis T. Yengoh, Samuel Obiri, David O. Yawson, **Ernest K. A. Afrifa** (2010). Food security and climate change in drought-sensitive savanna zones of Ghana. *Mitigation and Adaptation Strategies for Global Change*. https://doi.org/10.1007/s11027-010-9263-9
25. Frederick A Armah, **EKA Afrifa**, SKN Dadzie (2010). Ghana's fertilizer subsidy policy: early field lessons from farmers in the central region. *Journal of sustainable development in Africa*. https://www.academia.edu/download/70946772/GHANAS_FERTILIZER_SUBSIDY_POLICY_EARLY_20211001-12136-wbuosa.pdf
26. Frederick A. Armah, David O. Yawson, Genesis T. Yengoh, Justice O. Odoi, **Ernest K. A. Afrifa** (2010). Impact of Floods on Livelihoods and Vulnerability of Natural Resource Dependent Communities in Northern Ghana. *Water*. https://doi.org/10.3390/w2020120
27. Frederick A. Armah, Justice O. Odoi, David O. Yawson, Genesis T. Yengoh, **Ernest K.A. Afrifa**, Alex N.M. Pappoe (2010). Mapping of noise risk zones derived from religious activities and perceptions in residential neighbourhoods in the Cape Coast metropolis, Ghana. *Environmental Hazards*. https://doi.org/10.3763/ehaz.2010.0003
28. Frederick A. Armah, David O. Yawson, Alex N.M. Pappoe, **Ernest K.A. Afrifa** (2010). Participation and Sustainable Management of Coastal Lagoon Ecosystems: The Case of the Fosu Lagoon in Ghana. *Sustainability*. https://doi.org/10.3390/su2010383

**Theses** 1

1. **Ernest Kofi Amankwa Afrifa** (2025). Evaluasi Dampak Mikroplastik Terhadap Respon Fisiologis dan Struktur Histologis pada Benih Ikan Nila (Oreochromis niloticus) di Lingkungan Perairan. *Universitas Hasanuddin Makassar*. https://repository.unhas.ac.id/id/eprint/44898/