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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 Odoiouaye 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 Odoiouaye 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=scholar>
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*

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/>