Godfred Ohemeng-Boahen

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RESEARCH

Interests	Chemical and Biological Engineering · Water and wastewater treatment · nanoparticles
Areas	Water Science and Technology · Organic Chemistry · Biomedical Engineering · Electrical and Electronic Engineering · Food Science · Inorganic Chemistry

RESEARCH SUMMARY

26	489	11	11	1.51	20%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 26 publications listed below, 2018–2026. Field-weighted impact is the mean over the 15 works scored for it; 1.00 is the world average for works of the same field, type and year. 3 of the 15 papers scored for it are among the world's most cited tenth for their field, type and year.

POSITIONS

Lecturer 2020–present
Chemical Engineering, Kwame Nkrumah University of Science and Technology, College of Engineering, Kumasi, Ghana

EDUCATION AND QUALIFICATIONS

MEng. & Ph.D 2014–2020
Chemical and Biological Engineering, Hanbat National University, Daejeon, Korea

BSC 2009–2013
Chemical Engineering, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

PUBLICATIONS

Journal articles 24

1. **Godfred Ohemeng-Boahen**, Ebenezer Paa Effisah, Yaw Addo Diabene, Patrick Boakye, Niib Konwuruk (2026). Adsorptive removal of reactive blue 21 dye from aqueous solution using Na-Zeolite Y. *Next research.*. https://doi.org/10.1016/j.nexres.2026.102396
2. **Ohemeng-Boahen Godfred**, A Ntiamoah, HMK Essandoh (2026). Enhancement of Fluoride Uptake via Fe (III) Functionalization of Zeolite Y: Comparative Modification Approaches. *Microporous and Mesoporous Materials*. https://www.sciencedirect.com/science/article/pii/S138718112600209X
3. Drussilla A. Pobee, **Godfred Ohemeng-Boahen**, Augustine Ntiamoah, Helen M.K. Essandoh, Mandela Toku, Francis W.Y. Momade (2026). Enhancement of fluoride uptake via Fe (III) functionalisation of zeolite Y: Comparative modification approaches. *Microporous and Mesoporous Materials*. https://doi.org/10.1016/j.micromeso.2026.114234
4. Gideon Owusu, **Godfred Ohemeng-Boahen**, Jude Kwaku Bonsu, Patrick Boakye (2026). REGENERATION OF SPENT BLEACHING EARTH: OPTIMIZATION AND REUSABILITY STUDIES. *Journal of Science and Technology (Ghana)*. https://doi.org/10.4314/just.v44i2.5s

5. Augustine Ntiamoah, Bridget Ama Quansah, **Godfred Ohemeng-Boahen**, Nana Yaw Asiedu, Ulrike Gayh, Kenneth Bedu-Addo (2025). Environmental impacts of Small-Scale palm oil production in Ghana: A life cycle assessment study. *Environment Development and Sustainability*. https://doi.org/10.1007/s10668-025-06641-2

6. Seth Adusei, Emmanuel Kwesi Arthur, Emmanuel Gikunoo, William Amponsah, Frank Ofori Agyemang, **Godfred Ohemeng-Boahen** (2025). Heavy Metal Pollution From Illegal Mining 'Galamsey ' Activities on the Viability of Clarias gariepinus in the Oda River, Ghana. *Aquaculture Fish and Fisheries*. https://doi.org/10.1002/aff2.70076

7. Solomon Adumatta, Patrick Boakye, Mark Bediako, Adams Yen Sokama-Nueyam, **Godfred Ohemeng-Boahen**, Stephen Adjei (2025). Performance evaluation of low-grade calcined clay as a supplementary cementitious material for sustainable oil-well cementing. *International Journal of Sustainable Engineering*. https://doi.org/10.1080/19397038.2025.2550991

8. Daniel Ocloo, Frank Ofori Agyemang, Perseverance Dzikunu, Bennetta Koomson, **Godfred Ohemeng-Boahen**, Elizabeth Henewaa Akoto, Anthony Kwesi Martey (2025). Waste PET bottle-derived carbon for defluorination of fluoride-polluted water. *Environmental Technology*. https://doi.org/10.1080/09593330.2024.2447960

9. Augustine Owusu Sekyere, Martina Francisca Baidoo, **Godfred Ohemeng-Boahen**, Helen MK Essandoh (2024). Design optimization of ceramic membrane filters based on a response surface method. *Composites and Advanced Materials*. https://doi.org/10.1177/26349833241295778

10. **Ohemeng-Boahen Godfred**, HMK Essandoh, MF Baidoo (2024). Fabrication and characterization of a cost-effective ceramic microfiltration membrane by utilizing local raw materials. *Advances in Applied Ceramics*. https://doi.org/10.1177/17436753261492391

11. James Owusu-Kwarteng, Bababode Kehinde, **Godfred Ohomeng-Boahen**, Joshua Kojo Aduampong Mantey, Theodora Decardi-Nelson, Dominic Agyei (2024). The role of indigenous and traditional foods in achieving food security in Africa: A bibliometric snapshot and farm-to-fork perspective. *CABI Reviews*. https://doi.org/10.1079/cabireviews.2024.0022

12. Tracy Ann Bruce-Tagoe, Shyju Bhaskar, Ruchita Rao Kavle, Jaison Jeevanandam, Caleb Acquah, **Godfred Ohemeng-Boahen**, Dominic Agyei, Michael K. Danquah (2023). Advances in aptamer-based biosensors for monitoring foodborne pathogens. *Journal of Food Science and Technology*. https://doi.org/10.1007/s13197-023-05889-8

13. **Ohemeng-Boahen Godfred**, P Boakye, YA Sokama-Neuyam (2023). Iron-Based Nanocomposite Hydrogels for Dye Removal from Wastewater. *Nanocomposite Hydrogels and their Emerging Applications*. https://scholar.google.com/scholar?cluster=6562513038680247486&hl=en&oi=scholarr

14. Samuel Erzuah, Wilberforce Nkrumah Aggrey, Joel Teye Tetteh, Vida Bodi, Caspar Daniel Adenutsi, Yen Adams Sokama-Neuyam, Kwame Sarkodie, William Ampomah, **Godfred Ohemeng-Boahen**, Kwabena Biritwum Nyarko (2023). Zeta potential prediction of dominant sandstone minerals via surface complexation modelling. *Scientific African*. https://doi.org/10.1016/j.sciaf.2023.e01721

15. Sudipta Chatterjee, **Godfred Ohemeng-Boahen**, Divine Damertey Sewu, Barnabas Asamoah Osei, Seung Han Woo (2022). Improved adsorption of Congo red from aqueous solution using alkali-treated goethite impregnated chitosan hydrogel capsule. *Journal of environmental chemical engineering*. https://doi.org/10.1016/j.jece.2022.108244

16. Patrick Boakye, **Godfred Ohemeng-Boahen**, Lawrence Darkwah, Yen Adams Sokama-Neuyam, Eugene Appiah-Effah, Sampson Oduro-Kwarteng, Barnabas Asamoah Osei, Prince Junior Asilevi, Seung Han Woo (2022). Waste Biomass and Biomaterials Adsorbents for Wastewater Treatment. *Green Energy and Environmental Technology*. https://doi.org/10.5772/geet.05

17. **Godfred Ohemeng-Boahen**, Divine Damertey Sewu, Hai Nguyen Tran, Seung Han Woo (2021). Enhanced adsorption of congo red from aqueous solution using chitosan/hematite nanocomposite hydrogel capsule fabricated via anionic surfactant gelation. *Colloids and Surfaces A Physicochemical and Engineering Aspects*. https://doi.org/10.1016/j.colsurfa.2021.126911

18. Caleb Acquah, **Godfred Ohemeng-Boahen**, Krista A. Power, Susan M. Tosh (2021). The Effect of

Processing on Bioactive Compounds and Nutritional Qualities of Pulses in Meeting the Sustainable Development Goal 2. *Frontiers in Sustainable Food Systems*. https://doi.org/10.3389/fsufs.2021.681662

19. **Ohemeng-Boahen Godfred** (2020). Facile magnetic biochar production route with new goethite nanoparticle precursor. *Science of the Total Environment*. https://www.sciencedirect.com/science/article/pii/S004896972030601X
20. **Ohemeng-Boahen Godfred**, Divine Damertey Sewu (2020). Multi-membrane formation in chitosan hydrogel shell by the addition of goethite nanoparticles. *Carbohydrate polymers*. https://www.sciencedirect.com/science/article/pii/S0144861719312111
21. Divine Damertey Sewu, **Godfred Ohemeng-Boahen** (2019). Characterization and adsorption performance evaluation of waste char by-product from industrial gasification of solid refuse fuel from municipal solid waste. *Waste Management*. https://www.sciencedirect.com/science/article/pii/S0956053X19302843
22. **OB Godfred** (2019). Efficient Removal of Cesium Ions From Aqueous Solution Using Alginate/Prussian Blue Composite Hydrogel Bead. *한국방사성폐기물학회 학술논문요약집*. https://scholar.google.com/scholar?cluster=12874091820590387521&hl=en&oi=scholarr
23. **Ohemeng-Boahen Godfred** (2019). Preparation and characterization of alginate-kelp biochar composite hydrogel bead for dye removal. *Environmental Science and Pollution Research*. https://doi.org/10.1007/s11356-019-06421-2
24. **OB Godfred** (2018). Supersorption capacity of anionic dye by newer chitosan hydrogel capsules via green surfactant exchange method. *ACS Sustainable Chemistry & Engineering*. https://doi.org/10.1021/acssuschemeng.7b03929

Reports 2

1. **Ohemeng-Boahen Godfred** (2021). Food proteins and peptides: Emerging biofunctions, food and biomaterial applications. *Royal Society of Chemistry*. https://books.google.com/books?hl=en&lr=&id=lS4zEAAAQBAJ&oi=fnd&pg=PA129&dq=info:afPHYSdfV98J:scholar.google.com&ots=nU8V9dhlf1&sig=ndcMksTtGRvZBszqzbzqcXv-IiE
2. **Ohemeng-Boahen Godfred** (2018). Supersorption capacity of anionic dye by newer chitosan hydrogel capsules via green surfactant exchange method. Acs Sustain Chem Eng 6, 3604-3614. *DOI*. https://scholar.google.com/scholar?cluster=11949074547406272458&hl=en&oi=scholarr