Godfred Darko

Department of Chemistry
Kwame Nkrumah University of Science and Technology

ORCID 0000-0001-7157-646X · Email gdarko.sci@knust.edu.gh · Homepage chemistry.knust.edu.gh/academic-faculty-staff/academic-staff/analyticalenvironmental-chemistry/G.Darko · webapps.knust.edu.gh webapps.knust.edu.gh/staff/dirsearch/profile/summary/a1a57085cc24.html · Google Scholar scholar.google.com/citations?user=B4-lr5YAAAAJ&hl=en · Profile knust.peerford.com/staff/3ae12658-f05d-4344-a77b-de488ff03b32

RESEARCH

Interests	Analytical and Environmental Chemistry
Areas	Pollution · Health, Toxicology and Mutagenesis · Radiological and Ultrasound Technology · Food Science · Analytical Chemistry · Building and Construction

RESEARCH SUMMARY

160	5,327	40	95	2.12	21%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 160 publications listed below, 2007–2026. Field-weighted impact is the mean over the 137 works scored for it; 1.00 is the world average for works of the same field, type and year. 29 of the 137 papers scored for it are among the world's most cited tenth for their field, type and year.

POSITIONS

Professor
Chemistry, Kwame Nkrumah University of Science and Technology: Kumasi, Ashanti, GH, Kumasi, Ghana

EDUCATION AND QUALIFICATIONS

PhD 2009–2012
Department of Chemistry, Rhodes University, Grahamstown, South Africa

PUBLICATIONS

Journal articles 158

1. **Godfred Darko**, Peter Sadari, Daniel Quarshie, Georgina Anokye Agyekum, Yula Salifu, Frank Offei Odonkor, Kofi Sekyere Boateng (2026). Additional file 1 of Living with type 2 diabetes: stress and daily life challenges among adults in the Ashanti Region, Ghana. *Figshare*. https://doi.org/10.6084/m9.figshare.33284700.v1
2. **Godfred Darko**, Peter Sadari, Daniel Quarshie, Georgina Anokye Agyekum, Yula Salifu, Frank Offei Odonkor, Kofi Sekyere Boateng (2026). Additional file 2 of Living with type 2 diabetes: stress and daily life challenges among adults in the Ashanti Region, Ghana. *Figshare*. https://doi.org/10.6084/m9.figshare.33284703.v1
3. Opoku Gyamfi, Patricia Doe Arthur-Jim, Berlin Manasseh Awotwe, Eugene Ansah, Lawerence Sheringham Borquaye, Matt Dodd, **Godfred Darko** (2026). Distribution and sediment quality of heavy metals in riverine sediments in Kumasi, Ghana. *Soil and Sediment Contamination An International Journal*. https://doi.org/10.1080/15320383.2025.2612287
4. Francis Nyarkoh, Evans Barimah, **Godfred Darko**, Michael Konney Laryea, Lawrence Sheringham Borquaye (2026). Hydrochemical evolution and spatial variability of groundwater in a peri-urban basement aquifer, Kumasi, Ghana. *Total Environment Advances*. https://doi.org/10.1016/j.teadva.2026.200170

5. Edward Ankapong, Opoku Gyamfi, Peter Amoah Amponsah, Matt Dodd, **Godfred Darko** (2026). Radiological health risks of natural radionuclides in classroom dust in Ghana's Ashanti Region. *Discover Chemistry.*. https://doi.org/10.1007/s44371-026-00875-3

6. Caleb Nketia Mensah, Prince Manu, Randolf Benle, Emmanuella Aba Antwi, Michael Konney Laryea, **Godfred Darko**, Cedric Dzidzor Amengor, Lawrence Sheringham Borquaye (2025). Antifungal potential of Salacia debilis extracts and compounds against Candida albicans: Biofilm inhibition, synergistic effects and computational studies. *Pharmacological Research - Natural Products*. https://doi.org/10.1016/j.prenap.2025.100448

7. Kwadwo Owusu Boakye, Matt Dodd, Maxwell Darko Asante, Vincent Logah, **Godfred Darko** (2025). Biochar Amendment in Remediation of Heavy Metals in Paddy Soil: A Case Study in Nobewam, Ghana. *Soil Systems*. https://doi.org/10.3390/soilsystems9020038

8. Prince Manu, Muntawakilu Padiga Seidu, Alice Adomako, Caleb Kusi Asamoah, Ophelia Duodu, Akyana Britwum, Michael Konney Laryea, **Godfred Darko**, Lawrence Sheringham Borquaye (2025). Computational elucidation of Plasmodium falciparum enoyl-ACP reductase inhibition by Salacia debilis compounds: adaptive ligand binding drives antimalarial activity. *In Silico Pharmacology*. https://doi.org/10.1007/s40203-025-00413-6

9. Kwadwo Owusu Boakye, **Godfred Darko**, Bright Owusu Asante, Enoch Tanor, Vincent Logah, Matt Dodd (2025). Consumers and farmer awareness and perception of heavy metal contamination in rice: Implications for food safety and sustainability. *Urban Agriculture & Regional Food Systems*. https://doi.org/10.1002/uar2.70012

10. Rita Opoku, Emmanuel Amponsah, Michael Konney Laryea, **Godfred Darko**, Lawrence Sheringham Borquaye (2025). Descriptive analysis of pharmaceutical disposal practices in Sekondi-Takoradi: implications for environmental and public health safety in Ghana. *Discover Public Health*. https://doi.org/10.1186/s12982-025-00962-3

11. Edward Ankapong, Opoku Gyamfi, Victor Agyei, Kwadwo Owusu Boakye, Kofi Sarpong, Eugene Ansah, Emmanuel Frimpong, Matt Dodd, **Godfred Darko** (2025). Ecological and human health risks due to potentially toxic metals in selected water and food crops from soils in major mining areas in Ghana. *Environment Development and Sustainability*. https://doi.org/10.1007/s10668-025-06594-6

12. Kofi Sarpong, Edward Ankapong, Opoku Gyamfi, Jemima Tiwaa Marfo, Lawrence Brenyah-Kankam, Victor Agyei, **Godfred Darko** (2025). Exposure and Risk of Toxic Elements through Medicinal Hydrophytes. *Biological Trace Element Research*. https://doi.org/10.1007/s12011-025-04878-6

13. B. Karim-Abdallah, **G. Okai Darko**, O. Gyabaah, L. Oteng Fening, I. Chimsi, M. A. A. Derkyi, A. Yeboah-Kyere (2025). Innovations, Technologies and Challenges Associated with Transnational Education. *African Journal Of Applied Research*. https://doi.org/10.26437/ajar.v11i1.870

14. Kwadwo Owusu Boakye, Matt Dodd, Maxwell Darko Asante, Vincent Logah, **Godfred Darko** (2025). Metal Contamination and Health Risk in Paddy Soils and Rice from Ghana's Semi-Deciduous Forest Zone. *Chemistry Africa*. https://doi.org/10.1007/s42250-025-01380-3

15. Seidu Atta Ishmael, Rita Opoku, Michael Konney Laryea, Edward Ebo Kwaansa-Ansah, **Godfred Darko**, Lawrence Sheringham Borquaye (2025). Occurrence and ecological risk assessment of commonly used pharmaceuticals in water and soil of Sefwi Wiawso, Ghana. *Discover Chemistry.*. https://doi.org/10.1007/s44371-025-00146-7

16. MK Laryea, **G Darko**, LS Borquaye (2025). Peptide Extract from Hexaplex trunculus: A Promising Antimicrobial Agent with Inhibitory Effects on Quorum Sensing and Biofilm Formation. *Pharmacological Research-Natural Products*. https://www.sciencedirect.com/science/article/pii/S2950199725001752

17. Seidu Atta Ishmael, Rita Opoku, Michael Konney Laryea, Emmanuel Amponsah, **Godfred Darko**, Enoch Jones Borketey, Lawrence Sheringham Borquaye (2025). Pharmaceutical Waste Disposal: A Cross-Sectional Survey of Disposal Practices and Awareness in Sefwi Wiawso Municipality, Ghana. *Health Science Reports*. https://doi.org/10.1002/hsr2.71320

18. R. Opoku, M. K. Laryea, **G. Darko**, L. S. Borquaye (2025). Pharmaceutical residues in environment matrices in the Sekondi-Takoradi metropolis of Ghana present potential ecotoxicological risks.

International Journal of Environmental Science and Technology. https://doi.org/10.1007/s13762-025-06471-9

19. Benjamin Darko Asamoah, Lily Lisa Yevugah, Lawrence Sheringham Borquaye, Matt Dodd, **Godfred Darko** (2025). Receptor modeling, ecological risks, and human health impacts of mercury in some Ghanaian topsoils due to mining and commercial activities. *Environmental Toxicology and Chemistry*. https://doi.org/10.1093/etojnl/vgaf054
20. Benjamin Darko Asamoah, Barnabas Awortwe, Lawrence Sheringham Borquaye, Matt Dodd, **Godfred Darko** (2025). Source Apportionment of Potentially Toxic Elements in Topsoils Across Some Mining-Impacted Communities in Ghana Using the Positive Matrix Factorization Model. *Soil and Sediment Contamination An International Journal*. https://doi.org/10.1080/15320383.2025.2574273
21. Edward Ankapong, Matt Dodd, **Godfred Darko** (2025). Speciation, contamination, and risk assessment of potentially toxic elements in soils from mining and non-mining areas in Ghana. *Environmental Geochemistry and Health*. https://doi.org/10.1007/s10653-025-02527-4
22. **G Darko** (2024). Amaryllidaceae Alkaloids as Potential Inhibitors of the Trypanosoma cruzi Trans-sialidase Enzyme: Unique Insights from Computational Studies. *Journal of Biological Chemistry*.
23. Charles Osei-Owusu, Opoku Gyamfi, Edward Ankapong, Kofi Sarpong, Victor Agyei, Kofi Agyapong Addo, Nana Yaa Awua-Boateng, Collins Kuffour, Papa Kofi Amissah-Reynolds, Eugene Ansah, Enoch Bessah, Emmanuel Dartey, Matt Dodd, **Godfred Darko** (2024). Assessment of Nicotine delivery capabilities and evaluation of human health risk of metals associated with selected tobacco products. *Discover Toxicology*. https://doi.org/10.1007/s44339-024-00005-7
24. Michael Owusu, Humphrey Darkeh Assem, Theophilus Aquinas Ossei-Anto, Frank Owusu Ansah, **Godfred Darko** (2024). Challenges in Understanding the Redox Reaction Concept among Level 200 Students in Science Colleges of Education in Ghana. *Creative Education*. https://doi.org/10.4236/ce.2024.1510134
25. Kwabena Kyere, Kofi Agyarko, Richard Kotei, Matt Dodd, **Godfred Darko**, Francis Kastro Kavi, Sonny Gad Attipoe (2024). Dumpsites farmers' awareness of physicochemical properties of dumpsites soil in two agro-ecological zones, Ghana. *Environmental Monitoring and Assessment*. https://doi.org/10.1007/s10661-024-13124-w
26. Benjamin Effah Dankwa, Bismark Anabila Nyaaba, Gershon Amenuvor, Seth Obiri-Yeboah, **Godfred Darko**, Michael Konney Laryea, Lawrence Sheringham Borquaye (2024). Ecological risk assessment of selected pharmaceuticals in major rivers within Kumasi, Ghana. *Essential Chem*. https://doi.org/10.1080/28378083.2024.2421861
27. Benjamin Effah Dankwa, Joseph Nana Gyesi, Bismark Anabila Nyaaba, Matilda Abena Ampah, Christian Kankam Boadu, Michael Konney Laryea, **Godfred Darko**, Lawrence Sheringham Borquaye (2024). Environmental impact of pharmaceutical contaminants in dumpsites: a study from Ejisu-Juaben municipality, Ghana. *Discover Soil*.. https://doi.org/10.1007/s44378-024-00007-2
28. Akwasi Acheampong, Kofi Sarpong, Osei Akoto, Joseph Apau, **Godfred Darko** (2024). Health Risk Assessments of Potentially Toxic Elements in Selected Medicinal Plants from the Ashanti Region of Ghana. *Chemistry Africa*. https://doi.org/10.1007/s42250-024-01076-0
29. Jennifer Tetteh, De-Youngster Wereko Brobbey, Kofi Junior Osei, Azumah Ayamah, Michael Konney Laryea, **Godfred Darko**, Lawrence Sheringham Borquaye (2024). Peptide Extract from Red Kidney Beans, Phaseolus vulgaris (Fabaceae), Shows Promising Antimicrobial, Antibiofilm, and Quorum Sensing Inhibitory Effects. *Biochemistry Research International*. https://doi.org/10.1155/2024/4667379
30. Edward Ankapong, Opoku Gyamfi, Victor Agyei, Matt Dodd, Osei Akoto, **Godfred Darko** (2024). Soil-to-plant transfer factors of uranium and thorium in mining and non-mining districts of Ghana. *Journal of Environmental Radioactivity*. https://doi.org/10.1016/j.jenvrad.2024.107566
31. Benjamin Darko Asamoah, Lily Lisa Yevugah, Lawrence Sheringham Borquaye, Matt Dodd, **Godfred Darko** (2024). Spatial distribution, bioaccessibility, and human health implications of potentially toxic elements in mining-impacted topsoils in Obuasi Municipality of Ghana. *Environmental Geochemistry and Health*. https://doi.org/10.1007/s10653-024-02028-w
32. Emmanuel Frimpong, Edward Ankapong, Kwadwo Owusu Boakye, Eugene Ansah, Opoku Gyamfi,

Benedict Barnes, Matt Dodd, **Godfred Darko** (2024). Uptake and in-vitro bioaccessibility of toxic metals in cocoa beans: Human health risks. *Environmental Geochemistry and Health*. https://doi.org/10.1007/s10653-024-02345-0

33. Jahnissi Frimpomah Odoom, Caleb Impraim Aboagye, Philipina Acheampong, Isaac Asiamah, **Godfred Darko**, Lawrence Sheringham Borquaye (2023). Chemical Composition, Antioxidant, and Antimicrobial Activities of the Leaf and Fruit Essential Oils of the West African Plum, Vitex doniana. *Journal of Chemistry*. https://doi.org/10.1155/2023/9959296
34. Benjamin Darko Asamoah, Matt Dodd, Lily Lisa Yevugah, Lawrence Sheringham Borquaye, Alexander Boateng, Marian Asantewah Nkansah, **Godfred Darko** (2023). Distribution and in-vitro bioaccessibility of potentially toxic metals in surface soils from a mining and a non-mining community in Ghana: implications for human health. *Environmental Geochemistry and Health*. https://doi.org/10.1007/s10653-023-01776-5
35. Lily Lisa Yevugah, EM Osei Jnr, Jesper Leth Bak, Marian Asantewah Nkansah, **Godfred Darko** (2023). Geospatial Distribution of Mercury in Surface Soils Across Ghana. *Chemistry Africa*. https://doi.org/10.1007/s42250-023-00681-9
36. Priscilla Akwaboah Oduro, Gloria Ankar-Brewoo, Matt Dodd, Eugene Ansah, Cynthia Darko, Lawrence Sheringham Borquaye, **Godfred Darko** (2023). Health risks of potentially toxic metals in cereal-based breakfast meals in the Kumasi Metropolis, Ghana. *Discover Food*. https://doi.org/10.1007/s44187-023-00067-3
37. Francisca Nti Konadu, Opoku Gyamfi, Eugene Ansah, Lawrence Sheringham Borquaye, Victor Agyei, Emmanuel Dartey, Matt Dodd, Seth Obiri-Yeboah, **Godfred Darko** (2023). Human health risk assessment of potentially toxic elements in soil and air particulate matter of automobile hub environments in Kumasi, Ghana. *Toxicology Reports*. https://doi.org/10.1016/j.toxrep.2023.09.010
38. Matt Dodd, Lydia Otoo Amponsah, Stephen Grundy, **Godfred Darko** (2023). Human health risk associated with metal exposure at Agbogbloshie e-waste site and the surrounding neighbourhood in Accra, Ghana. *Environmental Geochemistry and Health*. https://doi.org/10.1007/s10653-023-01503-0
39. Bismark Anabila Nyaaba, Joseph Nana Gyesi, **Godfred Darko**, Lawrence Sheringham Borquaye (2023). Occurrence and Ecological Risk Assessment of Pharmaceutical Residues in Effluents from Pharmaceutical Manufacturing Facilities in Kumasi, Ghana. *Chemistry Africa*. https://doi.org/10.1007/s42250-023-00703-6
40. Marian Asantewah Nkansah, Mavis Korankye, **Godfred Darko**, Matt Dodd, Francis Opoku (2023). Potential health risk and bio-accessibility of metal and minerals in saltpetre (a food additive). *Heliyon*. https://doi.org/10.1016/j.heliyon.2023.e13174
41. Bernice Araba Otoo, Ivy Anima Amoabeng, **Godfred Darko**, Lawrence Sheringham Borquaye (2022). Antibiotic and analgesic residues in the environment – Occurrence and ecological risk study from the Sunyani municipality, Ghana. *Toxicology Reports*. https://doi.org/10.1016/j.toxrep.2022.07.003
42. Opoku Gyamfi, Rejoice Selorm Wireko-Gyebi, Eugene Ansah, Peter Borgen Sorenson, Rudith Sylvana King, Marian Asantewah Nkansah, Jesper Leth Bak, **Godfred Darko** (2022). Assessment and Awareness of Health Risks Posed by Mercury in Artisanal Gold Mining in the Ashanti Region of Ghana. *Chemistry Africa*. https://doi.org/10.1007/s42250-022-00453-x
43. GM Ankar-Brewoo, **G Darko**, RC Abaidoo (2022). Dietary risk assessment due to the consumption of polycyclic aromatic hydrocarbon in two commonly consumed street vended foods. *Polycyclic Aromatic Compounds*.
44. Ivy Anima Amoabeng, Bernice Araba Otoo, **Godfred Darko**, Lawrence Sheringham Borquaye (2022). Disposal of Unused and Expired Medicines within the Sunyani Municipality of Ghana: A Cross-Sectional Survey. *Journal of Environmental and Public Health*. https://doi.org/10.1155/2022/6113346
45. Sampson Kofi Kyei, William Iheanyi Eke, **Godfred Darko**, Onyewuchi Akaranta (2022). Drying and adhesive properties of novel surface coatings derived from peanut skin extract and cashew nutshell liquid. *Pigment & Resin Technology*. https://doi.org/10.1108/prt-08-2021-0087
46. Gertrude Adomaa Asante Ampadu, Jehoshaphat Oppong Mensah, **Godfred Darko**, Lawrence Sheringham Borquaye (2022). Essential Oils from the Fruits and Leaves of Spondias mombin Linn.: Chemical

Composition, Biological Activity, and Molecular Docking Study. *Evidence-based Complementary and Alternative Medicine*. https://doi.org/10.1155/2022/7211015

47. **G Darko** (2022). Gastric bioaccessibility and human health risks associated with soil metal exposure via ingestion at an E-waste recycling site in Kumasi, Ghana. *Environmental Geochemistry and Health*.

48. Ewura Abena Coker, Bright Cephas Nkuah, Sandra Afia Amoanimaah, Joel Baffour Oppong, Opoku Gyamfi, Eugene Ansah, Kofi Agyarko Ababio, David Dotse Wemegah, Lawrence Sheringham Borquaye, **Godfred Darko** (2022). Human exposure to mercury in the atmosphere and soils in Konongo: an age-old mining centre in the Ashanti Region of Ghana. *Environmental Geochemistry and Health*. https://doi.org/10.1007/s10653-022-01441-3

49. Kwame Osei Boateng, Enock Dankyi, Joel Cox Menka Banahene, **Godfred Darko** (2022). Imidacloprid and Bifenthrin Residues in Cocoa Beans from Four Major Cocoa-Growing Regions of Ghana. *Chemistry Africa*. https://doi.org/10.1007/s42250-022-00439-9

50. Kwame Osei Boateng, Enock Dankyi, Isaac Kingsley Amponsah, Godfred Kweku Awudzi, Emmanuel Amponsah, **Godfred Darko** (2022). Knowledge, perception, and pesticide application practices among smallholder cocoa farmers in four Ghanaian cocoa-growing regions. *Toxicology Reports*. https://doi.org/10.1016/j.toxrep.2022.12.008

51. Lydia Otoo Amponsah, Peter Borgen Sørensen, Marian Asantewah Nkansah, Katrin Vorkamp, Lily Lisa Yevugah, **Godfred Darko** (2022). Mercury contamination of two e-waste recycling sites in Ghana: an investigation into mercury pollution at Dagomba Line (Kumasi) and Agbogbloshie (Accra). *Environmental Geochemistry and Health*. https://doi.org/10.1007/s10653-022-01295-9

52. Eugene Ansah, Jesper Leth Bak, Peter Sørensen, **Godfred Darko** (2022). Modelling mercury concentration in Ghanaian soil. *Chemosphere*. https://doi.org/10.1016/j.chemosphere.2022.135553

53. Sampson Kofi Kyei, William Iheanyi Eke, **Godfred Darko**, Onyewuchi Akaranta (2022). Natural polyhydroxy resins in surface coatings: a review. *Journal of Coatings Technology and Research*. https://doi.org/10.1007/s11998-021-00604-8

54. Joseph Nana Gyesi, Bismark Anabila Nyaaba, **Godfred Darko**, Felix Charles Mills-Robertson, Kodwo Miezah, Nana Aboagye Acheampong, Felicia Frimpong, Grace Gyimah, Bridget Quansah, Lawrence Sheringham Borquaye (2022). Occurrence of Pharmaceutical Residues and Antibiotic-Resistant Bacteria in Water and Sediments from Major Reservoirs (Owabi and Barekese Dams) in Ghana. *Journal of Chemistry*. https://doi.org/10.1155/2022/1802204

55. Kofi Sarpong, Akwasi Acheampong, **Godfred Darko**, Osei Akoto (2022). Potentially toxic Metal Loads in Soils Supporting Medicinal Plants in the Ashanti Region of Ghana. *Chemistry Africa*. https://doi.org/10.1007/s42250-022-00341-4

56. Selina Ama Saah, Nathaniel Owusu Boadi, Patrick Opare Sakyi, **Godfred Darko**, Michael Baah Mensah (2022). Risk of Exposure to Trace Elements through the Application of Facial Makeup Powders. *Journal of Chemistry*. https://doi.org/10.1155/2022/9229134

57. Stephen Appiah Takyi, Owusu Amponsah, **Godfred Darko**, Charles Peprah, Richard Apatewen Azerigyik, Gabriel Kofi Mawuko, Augustine Awolorinke Chiga (2022). Urbanization against ecologically sensitive areas: effects of land use activities on surface water bodies in the Kumasi Metropolis. *International Journal of Urban Sustainable Development*. https://doi.org/10.1080/19463138.2022.2146121

58. Michael Osei Asibey, Rudith Sylvana King, Anne Mette Lykke, Daniel K.B. Inkoom, **Godfred Darko** (2022). Workers perception of and coping with the health risks of informal electronic waste recycling in Ghana. *Local Environment*. https://doi.org/10.1080/13549839.2022.2145601

59. Melanie A. Snow, **Godfred Darko**, Opoku Gyamfi, Eugene Ansah, Knut Breivik, Christopher Hoang, Ying Duan Lei, Frank Wania (2021). Characterization of inhalation exposure to gaseous elemental mercury during artisanal gold mining and e-waste recycling through combined stationary and personal passive sampling. *Environmental Science Processes & Impacts*. https://doi.org/10.1039/d0em00494d

60. Joseph Apau, Jonathan Osei-Owusu, Angela Yeboah, Opoku Gyamfi, **Godfred Darko**, Osei Akoto, Matt Dodd (2021). Distribution of heavy metals in sediments, physicochemical and microbial parameters of water from River Subin of Kumasi Metropolis in Ghana. *Scientific African*. https://doi.org/10.1016/j.sciaf.

2021.e01074

61. Niib Konwuruk, Lawrence Sheringham Borquaye, **Godfred Darko**, Matt Dodd (2021). Distribution, bioaccessibility and human health risks of toxic metals in peri-urban topsoils of the Kumasi Metropolis. *Scientific African*. https://doi.org/10.1016/j.sciaf.2021.e00701

62. Lily Lisa Yevugah, **Godfred Darko**, Jesper Bak (2021). Does mercury emission from small-scale gold mining cause widespread soil pollution in Ghana? *Environmental Pollution*. https://doi.org/10.1016/j.envpol.2021.116945

63. Daniel Nartey, Emmanuella Delali Accorley, Rita Opoku, **Godfred Darko**, Lawrence Sheringham Borquaye (2021). Essential Oils from Averrhoa carambola L. (Oxalidaceae): Chemical Composition, Antioxidant, Antimicrobial and Anti-biofilm Potential. *Chemistry Africa*. https://doi.org/10.1007/s42250-021-00259-3

64. Ekpor Anyimah-Ackah, Isaac W. Ofosu, Herman Erick Lutterodt, **Godfred Darko**, David Okoh Kpeglo (2021). Excess lifetime cancer risk and committed effective dose associated with dietary exposure to radioactivity of natural origin from mining areas. *Journal of Consumer Protection and Food Safety*. https://doi.org/10.1007/s00003-021-01332-2

65. Ekpor Anyimah-Ackah, Isaac Williams Ofosu, Herman Erick Lutterodt, **Godfred Darko** (2021). Exposures and Health Risks Associated with Elements in Diets from a Gold Mining Area. *Biological Trace Element Research*. https://doi.org/10.1007/s12011-021-02777-0

66. Eric N. Aidoo, Simon K. Appiah, Gaston E. Awashie, Alexander Boateng, **Godfred Darko** (2021). Geographically weighted principal component analysis for characterising the spatial heterogeneity and connectivity of soil heavy metals in Kumasi, Ghana. *Heliyon*. https://doi.org/10.1016/j.heliyon.2021.e08039

67. Ekpor Anyimah-Ackah, Isaac Williams Ofosu, Herman Erick Lutterodt, **Godfred Darko** (2021). Health Benefit: Risk Assessment of Trace and Essential Elements Found in Cocoa Beans and Derived Products. *Chemistry Africa*. https://doi.org/10.1007/s42250-020-00214-8

68. Sampson Kofi Kyei, William Iheanyi Eke, Hajara Abdul-Karim, **Godfred Darko**, Onyewuchi Akaranta (2021). Phytochemicals from Peanut (Arachis hypogaea L.) Skin Extract with Potential for Pharmacological Activity. *Current Bioactive Compounds*. https://doi.org/10.2174/1573407217666210202092052

69. Marian Asantewah Nkansah, Dominic Adrewie, **Godfred Darko**, Matt Dodd (2021). Potential elemental exposure and health risk associated with the consumption of groundnut paste processed with local milling machines within the Kumasi metropolis. *Scientific African*. https://doi.org/10.1016/j.sciaf.2021.e00967

70. **Godfred Darko**, Seth Obiri-Yeboah, Stephen Appiah Takyi, Owusu Amponsah, Lawrence Sheringham Borquaye, Lydia Otoo Amponsah, Benedicta Y. Fosu-Mensah (2021). Urbanizing with or without nature: pollution effects of human activities on water quality of major rivers that drain the Kumasi Metropolis of Ghana. *Environmental Monitoring and Assessment*. https://doi.org/10.1007/s10661-021-09686-8

71. Cheetham Lawrence Mingle, **Godfred Darko**, Lawrence Sheringham Borquaye, Noah Kyame Asare-Donkor, Eric Woode, Francis Koranteng (2021). Veterinary Drug Residues in Beef, Chicken, and Egg from Ghana. *Chemistry Africa*. https://doi.org/10.1007/s42250-020-00225-5

72. **Godfred Darko**, Samuel Adjei, Marian Asantewah Nkansah, Lawrence Sheringham Borquaye, Kwadwo Owusu Boakye, Matt Dodd (2020). Accumulation and bioaccessibility of toxic metals in root tubers and soils from gold mining and farming communities in the Ashanti region of Ghana. *International Journal of Environmental Health Research*. https://doi.org/10.1080/09603123.2020.1772203

73. Jennifer Amo-Mensah, **Godfred Darko**, Lawrence Sheringham Borquaye (2020). Anti-inflammatory and antioxidant activities of the root and bark extracts of Vitex grandifolia (Verbanaceae). *Scientific African*. https://doi.org/10.1016/j.sciaf.2020.e00586

74. David Azanu, Sven Erik Jørgensen, **Godfred Darko**, Bjarne Styrishave, Robert Clement Abaidoo (2020). Antibiotic Uptake by Plant Model. *Environmental Modeling & Assessment*. https://doi.org/10.1007/s10666-020-09712-y

75. D Azanu, **G Darko**, RC Abaidoo (2020). Antibiotic Uptake by Plant Model: Azanu D. et al. *Environmental*

Modeling & Assessment.

76. Sampson Kofi Kyei, **Godfred Darko**, Onyewuchi Akaranta (2020). Chemistry and application of emerging ecofriendly antifouling paints: a review. *Journal of Coatings Technology and Research*. https://doi.org/10.1007/s11998-019-00294-3

77. Ekpor Anyimah–Ackah, Isaac W. Ofosu, Herman Erick Lutterodt, **Godfred Darko** (2020). Consumer Characteristics and Consumption Analytics of Frequently Consumed Food Categories in Mining Areas. *Academic Journal of Life Sciences*. https://doi.org/10.32861/ajls.65.39.52

78. Almachiusi Rwegasira Rweyemamu, Marian Asantewah Nkansah, **Godfred Darko**, Matt Dodd (2020). Contamination and Human Health Risk Due to Toxic Metals in Dust from Transport Stations in the Kumasi Metropolis, Ghana. *Chemistry Africa*. https://doi.org/10.1007/s42250-020-00174-z

79. Opoku Gyamfi, Peter Borgen Sørensen, **Godfred Darko**, Eugene Ansah, Katrin Vorkamp, Jesper Leth Bak (2020). Contamination, exposure and risk assessment of mercury in the soils of an artisanal gold mining community in Ghana. *Chemosphere*. https://doi.org/10.1016/j.chemosphere.2020.128910

80. Gloria Mathanda Ankar-Brewoo, **Godfred Darko**, Robert Clement Abaidoo, Anders Dalsgaard, Paa-Nii Johnson, William Otoo Ellis, Leon Brimer (2020). Dietary Risk Assessment Due to the Consumption of Polycyclic Aromatic Hydrocarbon in Two Commonly Consumed Street Vended Foods. *Polycyclic aromatic compounds*. https://doi.org/10.1080/10406638.2020.1830128

81. Ahmad Addo, Sandra Boakye, Lawrence Sheringham Borquaye, Matt Dodd, **Godfred Darko** (2020). Distribution of heavy metals in soils from abandoned dump sites in Kumasi, Ghana. *Scientific African*. https://doi.org/10.1016/j.sciaf.2020.e00614

82. Lydia Otoo Amponsah, Matt Dodd, **Godfred Darko** (2020). Gastric bioaccessibility and human health risks associated with soil metal exposure via ingestion at an E-waste recycling site in Kumasi, Ghana. *Environmental Geochemistry and Health*. https://doi.org/10.1007/s10653-020-00760-7

83. Gloria Mathanda Ankar-Brewoo, **Godfred Darko**, Robert Clement Abaidoo, Anders Dalsgaard, Paa-Nii Johnson, William Otoo Ellis, Leon Brimer (2020). Health risks of toxic metals (Al, Fe and Pb) in two common street vended foods, fufu and fried-rice, in Kumasi, Ghana. *Scientific African*. https://doi.org/10.1016/j.sciaf.2020.e00289

84. Cheetham Lawrence Mingle, **Godfred Darko**, Noah Kyame Asare-Donkor, Lawrence Sheringham Borquaye, Eric Woode (2020). Patterns in protein consumption in Ghanaian cities. *Scientific African*. https://doi.org/10.1016/j.sciaf.2020.e00684

85. Rejoice Selorm Wireko-Gyebi, Michael Osei Asibey, Owusu Amponsah, Rudith Sylvana King, Imoro Braimah, **Godfred Darko**, Anne Mette Lykke (2020). Perception of Small-Scale Miners on Interventions to Eradicate Illegal Small-Scale Mining in Ghana. *SAGE Open*. https://doi.org/10.1177/2158244020963668

86. Augustina Angelina Sylverken, **G Darko**, 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

87. Sampson Kofi Kyei, Onyewuchi Akaranta, **Godfred Darko** (2020). Synthesis, characterization and antimicrobial activity of peanut skin extract-azo-compounds. *Scientific African*. https://doi.org/10.1016/j.sciaf.2020.e00406

88. Ekpor Anyimah-Ackah, Isaac W Ofosu, Herman E Lutterodt, **Godfred Darko** (2019). Exposures and risks of arsenic, cadmium, lead, and mercury in cocoa beans and cocoa-based foods: a systematic review. *Food Quality and Safety*. https://doi.org/10.1093/fqsafe/fyy025

89. Sampson Kofi Kyei, Onyewuchi Akaranta, **Godfred Darko**, Uche J. Chukwu (2019). Extraction, Characterization and Application of Cashew Nut Shell Liquid from Cashew Nut Shells. *Chemical Science International Journal*. https://doi.org/10.9734/csji/2019/v28i330143

90. **Godfred Darko**, Kwadwo Owusu Boakye, Marian Asantewaa Nkansah, Opoku Gyamfi, Eugene Ansah, Lily

Lisa Yevugah, Akwasi Acheampong, Matt Dodd (2019). Human Health Risk and Bioaccessibility of Toxic Metals in Topsoils from Gbani Mining Community in Ghana. *Journal of Health and Pollution*. https://doi.org/10.5696/2156-9614-9.22.190602

91. Opoku Gyamfi, Peter Borgen Sorenson, **Godfred Darko**, Eugene Ansah, Jesper Leth Bak (2019). Human health risk assessment of exposure to indoor mercury vapour in a Ghanaian artisanal small-scale gold mining community. *Chemosphere*. https://doi.org/10.1016/j.chemosphere.2019.125014

92. Lawrence Sheringham Borquaye, Edmund Ekuadzi, **Godfred Darko**, Hubert Senanu Ahor, Sarah Twumwah Nsiah, Jemima Asi Lartey, Abdul-Hakim Mutala, Vivian Etsiapa Boamah, Eric Woode (2019). Occurrence of Antibiotics and Antibiotic-Resistant Bacteria in Landfill Sites in Kumasi, Ghana. *Journal of Chemistry*. https://doi.org/10.1155/2019/6934507

93. **Godfred Darko** (2018). Assessment of heavy metal contamination and distribution in surface soils and plants along the west coast of Ghana. *West African Journal of Applied Ecology*. https://www.academia.edu/download/99688237/171891.pdf

94. Nathaniel Owusu Boadi, Lawrence Sheringham Borquaye, **Godfred Darko**, David Dotse Wemegah, Dodzi Agorsor, Randy Akrofi (2018). Assessment of the quality of the Owabi reservoir and its tributaries. *Cogent Food & Agriculture*. https://doi.org/10.1080/23311932.2018.1492360

95. Akwasi Acheampong, Albert Gyebi, **Godfred Darko**, Joseph Apau, Wilfred Owusu Gyasi, Sylvester Addai-Arhin (2018). Development and validation of RP-HPLC method for simultaneous estimation of sulfadoxine and pyrimethamine in tablet dosage form using diclofenac as internal standard. *Cogent Chemistry*. https://doi.org/10.1080/23312009.2018.1472198

96. **Godfred Darko**, E Ekuadzi (2018). Disposal of unused and expired medicines in Ghana. *West African Journal of Pharmacy*. https://scholar.google.com/scholar?cluster=4425978877945939788&hl=en&oi=scholarr

97. Ofosu Isaac W, Akomea-Frempong Samuel, E Owusu-Ansah, **Darko Godfred** (2018). Exposure and Risk Assessment of Selected Chemical Hazards in Cabbage and Lettuce. *Journal of Toxicology and Risk Assessment*. https://doi.org/10.23937/2572-4061.1510014

98. Lawrence Sheringham Borquaye, **Godfred Darko**, Michael Konney Laryea, Victor Roberts, Richmond Boateng, Edward Ntim Gasu (2017). Anti-inflammatory activities of extracts fromOliva sp., Patella rustica, andLittorina littoreacollected from Ghana's coastal shorelines. *Cogent Biology*. https://doi.org/10.1080/23312025.2017.1364063

99. Marian Asantewah Nkansah, **Godfred Darko**, Matt Dodd, Francis Opoku, Thomas Bentum Essuman, Joshua Antwi-Boasiako (2017). Assessment of pollution levels, potential ecological risk and human health risk of heavy metals/metalloids in dust around fuel filling stations from the Kumasi Metropolis, Ghana. *Sustainable Environment*. https://doi.org/10.1080/23311843.2017.1412153

100. O Akoto, **G Darko**, VR Barnes (2017). Changes in water quality in the Owabi water treatment plant in Ghana. *Applied water science*.

101. **Godfred Darko**, Matt Dodd, Marian Asantewah Nkansah, Eugene Ansah, Yaw Aduse-Poku (2017). Distribution and bioaccessibility of metals in urban soils of Kumasi, Ghana. *Environmental Monitoring and Assessment*. https://doi.org/10.1007/s10661-017-5972-9

102. **Godfred Darko**, Matt Dodd, Marian Asantewah Nkansah, Yaw Aduse-Poku, Eugene Ansah, David Dotse Wemegah, Lawrence Sheringham Borquaye (2017). Distribution and ecological risks of toxic metals in the topsoils in the Kumasi metropolis, Ghana. *Sustainable Environment*. https://doi.org/10.1080/23311843.2017.1354965

103. Samuel Akomea-Frempong, Isaac W. Ofosu, Emmanuel de-Graft Johnson Owusu-Ansah, **Godfred Darko** (2017). Health risks due to consumption of pesticides in ready-to-eat vegetables (salads) in Kumasi, Ghana. *International Journal of Food Contamination*. https://doi.org/10.1186/s40550-017-0058-6

104. **Godfred Darko**, Eugene Ansah, A. Faanu, David Azanu (2017). Natural radioactivity and heavy metal distribution in reservoirs in Ghana. *Polymer Journal*.

105. Lawrence Sheringham Borquaye, **Godfred Darko**, Michael Konney Laryea, Edward Ntim Gasu, Nana Afia

Abrafi Amponsah, Eunice Nyarkoah Appiah (2017). Nutritional and anti-nutrient profiles of some Ghanaian spices. *Cogent Food & Agriculture*. https://doi.org/10.1080/23311932.2017.1348185

106. Boampong Godfred, Bjarne Styrishave, **Godfred Darko**, Johan Juhl Weisser, Robert Clement Abaidoo (2017). Occurrence and risk assessment of antibiotics in water and lettuce in Ghana. *The Science of The Total Environment*. https://doi.org/10.1016/j.scitotenv.2017.11.287

107. **Godfred Darko**, Jonah Addai Tabi, Michael Kodwo Adjaloo, Lawrence Sheringham Borquaye (2017). Pesticide Residues in Honey from the Major Honey Producing Forest Belts in Ghana. *Journal of Environmental and Public Health*. https://doi.org/10.1155/2017/7957431

108. **Godfred Darko** (2017). Significance of ear wax impaction in school children: a case of winneba west circuit, ghana. *Journal of Health, Medicine and Nursing*. https://www.academia.edu/download/118113823/234692021.pdf

109. **Godfred Darko**, Lawrence Sheringham Borquaye, Akwasi Acheampong, Kwasi Oppong (2017). Veterinary antibiotics in dairy products from Kumasi, Ghana. *Cogent Chemistry*. https://doi.org/10.1080/23312009.2017.1343636

110. **Godfred Darko**, David Azanu, Nelson Kwame Logo (2016). Accumulation of toxic metals in fish raised from sewage-fed aquaculture and estimated health risks associated with their consumption. *Sustainable Environment*. https://doi.org/10.1080/23311843.2016.1190116

111. Lawrence Sheringham Borquaye, **Godfred Darko**, Novisi Oklu, Constance Anson-Yevu, Annette Ababio (2016). Antimicrobial and antioxidant activities of ethyl acetate and methanol extracts ofLittorina littoreaandGalatea paradoxa. *Cogent Chemistry*. https://doi.org/10.1080/23312009.2016.1161865

112. Benedicta Y. Fosu-Mensah, Elvis D. Okoffo, **Godfred Darko**, Christopher Gordon (2016). Assessment of organochlorine pesticide residues in soils and drinking water sources from cocoa farms in Ghana. *SpringerPlus*. https://doi.org/10.1186/s40064-016-2352-9

113. Reginald Quansah, John R. Bend, Abukari Abdul-Rahaman, Frederick Ato Armah, Isaac Luginaah, David Kofi Essumang, Samuel Iddi, Jonathan Chevrier, Samuel Jerry Cobbina, Edward Nketiah-Amponsah, Samuel Adu-Kumi, **Godfred Darko**, Samuel Afful (2016). Associations between pesticide use and respiratory symptoms: A cross-sectional study in Southern Ghana. *Environmental Research*. https://doi.org/10.1016/j.envres.2016.06.013

114. **G Darko** (2016). Determination of triacylglycerol composition of Trichilia emetica seed oil using GC-MS and 1H-NMR spectroscopy. *Advances in Analytical Chemistry*. https://www.academia.edu/download/77788564/Jham_et_al-2003-Phytochemical_Analysis.pdf

115. **G Darko**, D Azanu (2016). Estimated health risks associated with consumption toxic metals in fish raised from sewage-fed aquaculture. *8th International Toxicology Symposium in Africa*. https://www.researchgate.net/profile/Rofiat-Abdus-Salaam/publication/344176527_Dietary_exposure_to_mycotoxins_by_adult_consumers_of_locally_processed_rice_from_Nigeria/links/676203dd1da39f14957f4fca/Dietary-exposure-to-mycotoxins-by-adult-consumers-of-locally-processed-rice-from-Nigeria.pdf#page=28

116. Marian Asantewah Nkansah, Mavis Korankye, **Godfred Darko**, Matt Dodd (2016). Heavy metal content and potential health risk of geophagic white clay from the Kumasi Metropolis in Ghana. *Toxicology Reports*. https://doi.org/10.1016/j.toxrep.2016.08.005

117. Andrews Obeng Affum, Shiloh Osae Dede, Benjamin Jabes Botwe Nyarko, Samuel Osafo Acquaah, Edward Ebow Kwaansa-Ansah, **Godfred Darko**, Adomako Dickson, Enoch Acheampong Affum, Joseph Richmond Fianko (2016). Influence of small-scale gold mining and toxic element concentrations in Bonsa river, Ghana: a potential risk to water quality and public health. *Environmental Earth Sciences*. https://doi.org/10.1007/s12665-015-5000-8

118. Benedicta Yayra Fosu-Mensah, Elvis Dartey Okoffo, **Godfred Darko**, Christopher Gordon (2016). Organophosphorus pesticide residues in soils and drinking water sources from cocoa producing areas in Ghana. *ENVIRONMENTAL SYSTEMS RESEARCH*. https://doi.org/10.1186/s40068-016-0063-4

119. **G Darko**, A Acheampong (2016). Public exposure to naturally occurring radioactivity in gold mining communities in Ghana. *8th International Toxicology Symposium in Africa*. https://www.researchgate.net/

profile/Rofiat-Abdus-Salaam/publication/344176527_Dietary_exposure_to_mycotoxins_by_adult_consumers_of_locally_processed_rice_from_Nigeria/links/676203dd1da39f14957f4fca/Dietary-exposure-to-mycotoxins-by-adult-consumers-of-locally-processed-rice-from-Nigeria.pdf#page=140

120. **Godfred Darko**, GY Obeng (2016). Repetitive use of vegetable cooking oil and effects on physico-chemical properties–Case of frying with redfish (Lutjanus fulgens). *Science and Technology*. https://www.academia.edu/download/54426228/10.5923.j.scit.20160601.02_1.pdf

121. David Azanu, Christiana Mortey, **Godfred Darko**, Johan Juhl Weisser, Bjarne Styrishave, Robert Clement Abaidoo (2016). Uptake of antibiotics from irrigation water by plants. *Chemosphere*. https://doi.org/10.1016/j.chemosphere.2016.05.035

122. Akwasi Acheampong, Wilfred Owusu Gyasi, **Godfred Darko**, Joseph Apau, Sylvester Addai-Arhin (2016). Validated RP-HPLC method for simultaneous determination and quantification of chlorpheniramine maleate, paracetamol and caffeine in tablet formulation. *SpringerPlus*. https://doi.org/10.1186/s40064-016-2241-2

123. Lawrence Sheringham Borquaye, **Godfred Darko**, Edward Ocansey, Emmanuel Ankomah (2015). Antimicrobial and antioxidant properties of the crude peptide extracts of Galatea paradoxa and Patella rustica. *SpringerPlus*. https://doi.org/10.1186/s40064-015-1266-2

124. **G Darko**, O Akoto (2015). Distribution and potential risks of heavy metals in fish, water and sediment. *Environmental Science*. https://scholar.google.com/scholar?cluster=10154141765344939199&hl=en&oi=scholarr

125. **Godfred Darko**, Augustine Faanu, Osei Akoto, Akwasi Acheampong, Eric Jude Goode, Opoku Gyamfi (2015). Distribution of natural and artificial radioactivity in soils, water and tuber crops. *Environmental Monitoring and Assessment*. https://doi.org/10.1007/s10661-015-4580-9

126. **Godfred Darko**, John Kenneth Mensah, Sylvester Samuel Dapaah, Judith Odei (2015). Estimated dietary exposure to veterinary residues in chicken and eggs. *International Journal of Food Contamination*. https://doi.org/10.1186/s40550-015-0022-2

127. David Azanu, Sven Erik JØrgensen, **Godfred Darko**, Bjarne Styrishave (2015). Simple metal model for predicting uptake and chemical processes in sewage-fed aquaculture ecosystem. *Ecological Modelling*. https://doi.org/10.1016/j.ecolmodel.2015.07.023

128. **Godfred Darko**, Annelies Goethals, Nelson Torto, Karen De Clerck (2015). Steady state electrospinning of uniform polyethersulfone nanofibers using a non-heated solvent mixture. *Applied Nanoscience*. https://doi.org/10.1007/s13204-015-0504-9

129. **G Darko** (2015). The reactivity of soil organic fractions towards cadmium, calcium, copper and zinc. *International Journal of Environmental Sciences*. https://indianjournals.com/api/article-view/ijes-5-4-007

130. Akwasi Acheampong, **Godfred Darko**, Joseph Apau, Adolf Oti-Boakye (2014). Assessment of Mercury Levels in Omega-3 Food Supplements Available on the Ghanaian Market.

131. **Godfred Darko**, Augustine Faanu, Osei Akoto, Francis Atta-Agyeman, Mary Ann Aikins, Bernice Agyemang, Ali Ibrahim (2014). Assessment of the activity of radionuclides and radiological impacts of consuming underground water in Kumasi, Ghana. *Environmental Earth Sciences*. https://doi.org/10.1007/s12665-014-3433-0

132. Osei Akoto, Opoku Gyamfi, **Godfred Darko**, Victor Rex Barnes (2014). Changes in water quality in the Owabi water treatment plant in Ghana. *Applied Water Science*. https://doi.org/10.1007/s13201-014-0232-4

133. **Godfred Darko**, AY Debrah (2014). Comparative analysis of environmental arsenic and other heavy metals in 2 Buruli Ulcer endemic districts in the Ashanti Region, Ghana. *Jenrm*. https://www.researchgate.net/profile/Samuel-Fosu-Gyasi/publication/285206533_Comparative_Analysis_of_Environmental_Arsenic_and_other_Heavy_Metals_in_2_Buruli_Ulcer_Endemic_Districts_of_Agogo_in_Ashanti_Region_Ghana/links/565d536f08aefe619b2556f7/Comparative-Analysis-of-Environmental-Arsenic-and-other-Heavy-Metals-in-2-Buruli-Ulcer-Endemic-Districts-of-Agogo-in-Ashanti-Region-Ghana.pdf

134. O Akoto, **G Darko** (2014). Concentrations and health risk assessments of heavy metals in fish from the

Fosu Lagoon. *INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH (IJER)*. https://www.sid.ir/EN/VEWSSID/J_pdf/108220140218.pdf

135. **G Darko** (2013). Health risk assessement of pesticide residues in maize and cowpea from Ejura, Ghana. *5th International Toxicology Symposium in Africa. Jointly Hosted by College of Science, Kwame Nkrumah University of Science and Technology, Ghana and Hokkaido University, Japan sponsored by Japan Society for Promotion of Science*.

136. O. Akoto, H. Andoh, **G. Darko**, K. Eshun, P. Osei-Fosu (2013). Health risk assessment of pesticides residue in maize and cowpea from Ejura, Ghana. *Chemosphere*. https://doi.org/10.1016/j.chemosphere.2013.02.057

137. Elvis Baidoo, James H. Ephraim, **Godfred Darko**, Osei Akoto (2013). Potentiometric studies of the acid–base properties of tropical humic acids. *Geoderma*. https://doi.org/10.1016/j.geoderma.2013.10.020

138. **G Darko**, S Chigome, S Lillywhite, Z Tshentu, J Darkwa, N Torto (2013). Sorption of toxic metal ions in aqueous environment using electrospun polystyrene fibres incorporating diazole ligands. *Water SA*. https://doi.org/10.4314/wsa.v39i1.6

139. Anokye M. Adam, **G Darko** (2013). Urinary arsenic and mercury levels in artisanal miners in some communities in the Obuasi Municipality of Ghana. *Journal of Environmental Chemistry and Ecotoxicology*. https://ir.uew.edu.gh/handle/123456789/1908

140. **Godfred Darko**, Robert Abaidoo, Olajire Fagbola, Robert Asiedu (2012). Diversity of arbuscular mycorrhizal fungi in soils of yam (Dioscoreaspp.) cropping systems in four agroecologies of Nigeria. *Archives of Agronomy and Soil Science*. https://doi.org/10.1080/03650340.2011.653682

141. Sam Adu-Kumi, Radovan Kareš, Jaromír Literák, Jana Borůvková, Philip O. Yeboah, Derick Carboo, Osei Akoto, **Godfred Darko**, Shiloh Osae, Jana Klánová (2012). Levels and seasonal variations of organochlorine pesticides in urban and rural background air of southern Ghana. *Environmental Science and Pollution Research*. https://doi.org/10.1007/s11356-012-1013-y

142. M Rammika, **G Darko**, N Torto (2012). Optimal synthesis of a Ni(II)-dimethylglyoxime ion-imprinted polymer for the enrichment of Ni(II) ions in water, soil and mine tailing samples. *Water SA*. https://doi.org/10.4314/wsa.v38i2.12

143. **Godfred Darko**, Abdullahi Sobola, Sheriff Adewuyi, Jonathan O. Okonkwo, Nelson Torto (2012). Pre-concentration of toxic metals using electrospun amino-functionalized nylon-6 nanofibre sorbent. *South African Journal of Chemistry*.

144. V. E. Pakade, E. M. Cukrowska, J. Darkwa, **G. Darko**, N. Torto, L. Chimuka (2012). Simple and efficient ion imprinted polymer for recovery of uranium from environmental samples. *Water Science & Technology*. https://doi.org/10.2166/wst.2012.911

145. Osei Akoto, **Godfred Darko**, Nkansah (2011). Chemical Composition of Rainwater over a Mining Area in Ghana. *International Journal of Environmental Research*. https://doi.org/10.22059/ijer.2011.442

146. M Rammika, **G Darko**, Z Tshentu, J Sewry, N Torto (2011). Dimethylglyoxime based ion-imprinted polymer for the determination of Ni(II) ions from aqueous samples. *Water SA*. https://doi.org/10.4314/wsa.v37i3.68483

147. Samuel Chigome, **Godfred Darko**, Nelson Torto (2011). Electrospun nanofibers as sorbent material for solid phase extraction. *The Analyst*. https://doi.org/10.1039/c1an15228a

148. **Godfred Darko**, Samuel Chigome, Zenixole Tshentu, Nelson Torto (2011). Enrichment of Cu(II), Ni(II), and Pb(II) in Aqueous Solutions Using Electrospun Polysulfone Nanofibers Functionalized with 1-[Bis[3-(Dimethylamino)-propyl]amino]-2-propanol. *Analytical Letters*. https://doi.org/10.1080/00032719.2010.539725

149. **G Darko** (2011). Evaluation of the levels of organochlorine pesticide residues in water samples of Lagos Lagoon using solid phase extraction method. *Journal of Environmental Chemistry and Ecotoxicology*. https://academicjournals.org/article/article1379489640_Adeyemi%20et%20al.pdf

150. M Rammika, **G Darko**, N Torto (2011). Incorporation of Ni(II)-dimethylglyoxime ion-imprinted polymer into electrospun polysulphone nanofibre for the determination of Ni(II) ions from aqueous samples. *Water*

SA. https://doi.org/10.4314/wsa.v37i4.12

151. Samuel Chigome, **Godfred Darko**, Ulrich Buttner, Nelson Torto (2010). Semi-micro solid phase extraction with electrospun polystyrene fiber disks. *Analytical Methods*. https://doi.org/10.1039/c0ay00092b
152. Osei Akoto, Theophilus Nicolas Bruce, **Godfred Darko** (2009). Chemical and biological characteristics of streams in the Owabi watershed. *Environmental Monitoring and Assessment*. https://doi.org/10.1007/s10661-009-0757-4
153. Bright Kwakye-Awuah, **G Darko** (2009). Heavy metals pollution in surface soils in the vicinity of abundant railway servicing workshop in Kumasi, Ghana. *University of Tehran*. https://utoronto.scholaris.ca/items/22bda14a-515d-4f0a-94a8-2a21f9d42000
154. **Godfred Darko**, Osei Akoto (2008). Dietary intake of organophosphorus pesticide residues through vegetables from Kumasi, Ghana. *Food and Chemical Toxicology*. https://doi.org/10.1016/j.fct.2008.09.049
155. O Akoto, **G Darko** (2008). Heavy metals pollution profiles in streams serving the Owabi reservoir. *African Journal of Environmental Science and Technology*. https://www.ajol.info/index.php/ajest/article/view/135696
156. **Godfred Darko**, Osei Akoto, Caleb Oppong (2008). Persistent organochlorine pesticide residues in fish, sediments and water from Lake Bosomtwi, Ghana. *Chemosphere*. https://doi.org/10.1016/j.chemosphere.2008.02.052
157. **Godfred Darko**, Samuel Osafo Acquaah (2007). Levels of organochlorine pesticides residues in dairy products in Kumasi, Ghana. *Chemosphere*. https://doi.org/10.1016/j.chemosphere.2007.09.005
158. **G. Darko**, S. O. Acquaah (2007). Levels of organochlorine pesticides residues in meat. *International Journal of Environmental Science and Technology*. https://doi.org/10.1007/bf03325989

Book chapters 2

1. Seth Obiri-Yeboah, Emmanuel Frimpong, Peiyue Li, **Godfred Darko** (2026). Artificial Intelligence Techniques in Hydrogeological Modelling and Forecasting: Techniques, Applications, and Future Directions. *Springer hydrogeology*. https://doi.org/10.1007/978-3-032-18853-3_4
2. Seth Obiri-Yeboah, Opoku Gyamfi, Peiyue Li, Osei Akoto, **Godfred Darko** (2025). Impacts of Artisanal Small-Scale Mining and Climate Change on Groundwater Security: The Case of the Global South. *Springer hydrogeology*. https://doi.org/10.1007/978-3-031-82194-3_3