# Johannes Akpabla Mawuli Awudza

Department of Chemistry
Kwame Nkrumah University of Science and Technology

ORCID 0000-0003-4606-1848 · Profile knust.peerford.com/staff/82a5af29-417e-4448-af9e-7709e58dfa55

## RESEARCH

Areas: Electrical and Electronic Engineering · Materials Chemistry · Organic Chemistry · Water Science and Technology · Electronic, Optical and Magnetic Materials · Civil and Structural Engineering

## RESEARCH SUMMARY

| 45 | 873 | 15 | 21 | 1.05 | 9% |
|---|---|---|---|---|---|
| Publications | Citations | h-index | i10-index | Field-weighted impact | World top 10% |

Counted from the 45 publications listed below, 1990–2025. Field-weighted impact is the mean over the 45 works scored for it; 1.00 is the world average for works of the same field, type and year. 4 of the 45 papers scored for it are among the world's most cited tenth for their field, type and year.

## PUBLICATIONS

### Journal articles 41

1. Benjamin K. Kokloku, **Johannes A.M. Awudza**, Michael B. Mensah, Mizpah A.D. Rockson, Francis Kemausuor (2025). Characterization of Ghanaian clays as raw materials for the synthesis of ZSM-5 zeolite. *Scientific African*. https://doi.org/10.1016/j.sciaf.2025.e02570
2. Selina Ama Saah, Nathaniel Owusu Boadi, **Johannes A. M. Awudza** (2025). Nickel piperidine dithiocarbamate: synthesis, characterization, and crystal structure. *Molecular Crystals and Liquid Crystals*. https://doi.org/10.1080/15421406.2025.2569492
3. Moustafa Acakpo, Nana Sarfo Agyemang Derkyi, **Johannes Akpabli Mawuli Awudza**, Benjamin Kwadzo Kokloku, Felix Amankwah Diawuo (2025). Optimization of biodiesel production using oil extracted from microalgae harvested in Ghana. *South African Journal of Chemical Engineering*. https://doi.org/10.1016/j.sajce.2025.04.019
4. Peter T. Ndifon, **Johannes Awudza**, Neerish Revaprasadu, Paul O'Brien, David J. Lewis (2024). Portrait of a UK–Africa Capacity Building Initiative Consortium 2015–2022: the Cameroon, Ghana, South Africa and United Kingdom Materials Initiative (CaGSUMI) for developing materials for solar cells. *Interface Focus*. https://doi.org/10.1098/rsfs.2023.0057
5. Selina Ama Saah, Nathaniel Owusu Boadi, **Johannes A. M. Awudza** (2024). Trivalent bismuth xanthates: Synthesis and characterization. *MRS Advances*. https://doi.org/10.1557/s43580-024-00985-z
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8. Selina Ama Saah, Nathaniel Owusu Boadi, **Johannes A. M. Awudza**, Neerish Revaprasadu (2022). Structural influence of nitrogen adducts on the morphology of bismuth sulfide thin films. *MRS Advances*. https://doi.org/10.1557/s43580-022-00343-x
9. Michael B. Mensah, Henry Jumpah, Nathaniel O. Boadi, **Johannes A.M. Awudza** (2021). Assessment of quantities and composition of corn stover in Ghana and their conversion into bioethanol. *Scientific African*.

https://doi.org/10.1016/j.sciaf.2021.e00731

10. Bernice Y. Danu, Eric S. Agorku, Francis K. Ampong, **Johannes A.M. Awudza**, Bismark Owusu, Patrick N.O. Brown, Onoyivwe M. Ama, Peter O. Osifo, Suprakas S. Ray (2021). Chitosan-Graft-Sodium Alginate Encapsulated Vanadium Pentoxide (V2 O5 ) Nanocomposite for Adsorption and Antimicrobial Studies. *Journal of Advanced Materials Science and Engineering*. https://doi.org/10.33425/2771-666x.1006
11. M. Djibrilla Alio Sanda, Mercy Badu, **Awudza, Johannes A. M.**, Boadi, Nathaniel O. (2021). Development of TiO2-based dye-sensitized solar cells using natural dyes extracted from some plant-based materials. *Zenodo (CERN European Organization for Nuclear Research)*. https://doi.org/10.5281/zenodo.4018011
12. Michael B. Mensah, David J. Lewis, Nathaniel O. Boadi, **Johannes A. M. Awudza** (2021). Heavy metal pollution and the role of inorganic nanomaterials in environmental remediation. *Royal Society Open Science*. https://doi.org/10.1098/rsos.201485
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15. William Asante Nnuro, Daniel Amankwaah, **Johannes A. M. Awudza**, Samuel Afful (2020). Assessment of Heavy Metals and Proximate Analysis of Cocoa Beans from Selected Cocoa Growing Areas in Ghana. *International Research Journal of Pure and Applied Chemistry*. https://doi.org/10.9734/irjpac/2020/v21i1430245
16. Samuel Afful, **Johannes A. M. Awudza**, Shiloh Osae, Michael Tawiah, Ellis Enimil, Beatrice Puplampu, Gladys Adjei Mantey (2020). Determination of Extractable and Bound Organochlorine in Sediment by Instrumental Neutron Activation Analysis. *Chemical Science International Journal*. https://doi.org/10.9734/csji/2020/v29i630183
17. Osei T., Tagbor T. A., **Awudza J. A.M.** (2020). Natural Rubber Latex and Its Effects on Some Properties of Bitumen. *Current Materials Science*. https://doi.org/10.2174/2666145413666200127161958
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20. Selina Ama Saah, Malik Dilshad Khan, **Johannes A. M. Awudza**, Neerish Revaprasadu, Paul O'Brien (2019). A Facile Green Synthesis of Ultranarrow PbS Nanorods. *Journal of Inorganic and Organometallic Polymers and Materials*. https://doi.org/10.1007/s10904-019-01185-1
21. Nathaniel O. Boadi, Selina A. Saah, Madeleine Helliwell, **Johannes A. M. Awudza** (2019). Hot-Injection Synthesis of PbE (E= S, Se) Nanoparticles from Dichalcogenoimidophosphinato Lead (II) Complexes. *ChemistrySelect*. https://doi.org/10.1002/slct.201903649
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27. A Seghosime, A.B. Ebeigbe, **J.A.M. Awudza** (2018). Potential use of Mangifera indica seed kernel and Citrus aurantiifolia seed in water disinfection. *Nigerian Journal of Technology*. https://doi.org/10.4314/njt.v36i4.41
28. Emmanuel O. Oyelude, **Johannes A. M. Awudza**, Sylvester K. Twumasi (2018). Removal of malachite green from aqueous solution using pulverized teak leaf litter: equilibrium, kinetic and thermodynamic studies. *Chemistry Central Journal*. https://doi.org/10.1186/s13065-018-0448-8
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33. Oyelude, Emmanuel Olajide, **Awudza, Johannes A.M.**, Twumasi, Sylvester K. (2017). Removal of malachite green from aqueous solution using activated carbon prepared from teak leaf litter. *Moroccan Journal of chemistry*. https://doi.org/10.48317/imist.prsm/morjchem-v6i4.10035
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35. Paul D. McNaughter, Selina A. Saah, Masood Akhtar, Khadijat Abdulwahab, M. Azad Malik, James Raftery, **Johannes A. M. Awudza**, Paul O'Brien (2016). The effect of alkyl chain length on the structure of lead( ii ) xanthates and their decomposition to PbS in melt reactions. *Dalton Transactions*. https://doi.org/10.1039/c6dt02859d
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38. Samuel Afful, **Johannes A.M. Awudza**, Stevester K. Twumasi, Shiloh Osae (2013). Determination of indicator polychlorinated biphenyls (PCBs) by gas chromatography–electron capture detector. *Chemosphere*. https://doi.org/10.1016/j.chemosphere.2013.08.001

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### Book chapters 4

1. Michael Baah Mensah, Michael Boadu, Ebenezer Owusu Afriyie, Elizabeth Adu, Nathaniel Owusu Boadi, **Johannes A.M. Awudza**, David J. Lewis (2024). Hybrid metal sulfide nanomaterials for the removal of heavy metal water contaminants. *Elsevier eBooks*. https://doi.org/10.1016/b978-0-443-13464-7.00011-6

2. Theresah Osei, Trinity Ama Tagbor, **Johannes A.M. Awudza**, Mehmet Serkan Kırgız (2023). Clay and natural latex as admixture in binary and ternary bitumen binder system for transportation and geotechnical applications. *Elsevier eBooks*. https://doi.org/10.1016/b978-0-323-90791-0.00010-x

3. Theresah Osei, Trinity Ama Tagbor, **Johannes A.M. Awudza**, Mehmet Serkan Kırgız (2023). Natural rubber latex-substituted-bitumen binder and bitumen binder-based materials used in highway. *Elsevier eBooks*. https://doi.org/10.1016/b978-0-323-90791-0.00003-2

4. **Johannes A. Mawuli Awudza** (1990). Science and religion: a Ghanaian perspective. https://doi.org/10.1007/978-94-009-2021-7_14