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RESEARCH

Interests Photophysics of phthalocyanines · Molecular recognition chemistry · Photocatalysis
Areas Materials Chemistry · Renewable Energy, Sustainability and the Environment · Organic Chemistry · Water Science and Technology · Electrical and Electronic Engineering · Inorganic Chemistry

RESEARCH SUMMARY

34	380	13	15	0.64	0%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 34 publications listed below, 2003–2026. Field-weighted impact is the mean over the 27 works scored for it; 1.00 is the world average for works of the same field, type and year. 0 of the 27 papers scored for it are among the world's most cited tenth for their field, type and year.

PUBLICATIONS

Journal articles 32

1. Samuel Kofi Tulashie, Abdul-Wadud Ibrahim Atiiga, Stephen Mensah, Simon Obutey Teye, Rachael Arkorful, Mustapha Iddrisu, Mavis Olayemi Olorunyomi, Francis Nsiah, Ruphino Zugle, George Alimoh, Genevieve Adukpo, Samuel Koomson (2026). Benchmarking accessible electrode materials for electrochemical sodium hypochlorite production. *Discover Electrochemistry*. <https://doi.org/10.1007/s44373-026-00152-z>
2. Aba Akebi Atta-Eyison, Ruphino Zugle (2026). Fabrication of Optically Active Cerium Metal-Organic Framework (Ce-5AIA) for Photocatalytic Degradation of Remazol Brilliant Violet 5R (RBV-5R). *Journal of Materials Science and Chemical Engineering*. <https://doi.org/10.4236/msce.2026.143007>
3. Aba Akebi Atta-Eyison, Ruphino Zugle (2025). Effect of parameter variation on the coordination of 5-amino benzene-1, 3-dicarboxylic acid under the solvothermal technique for catalytic adsorption. *Results in Chemistry*. <https://doi.org/10.1016/j.rechem.2025.102169>
4. Aba Atta-Eyison, Ruphino Zugle (2024). Synthesis and Characterization of Highly Efficient Cu-BTC MOF, ([Cu₃(C₉H₃O₆)₂].3H₂O{18H₂O}) Photocatalyst for the Adsorptive Transformation of Coloured Organic Pollutants in Water. *Modern Chemistry*. <https://doi.org/10.11648/j.mc.20241203.11>
5. Aba Akebi Atta-Eyison, Gloria Daisy Anukwah, Ruphino Zugle (2021). Photocatalysis using zinc oxide-zinc phthalocyanine composite for effective mineralization of organic pollutants. *Catalysis Communications*. <https://doi.org/10.1016/j.catcom.2021.106357>
6. Michael Akrofi Anang, Ruphino Zugle, B Sefa-Ntiri (2021). Photodegradation Efficiencies of MIL-53 (Al) of Dyes. *Journal of Materials Science Research and Reviews*. https://www.researchgate.net/profile/Michael-Anang/publication/358118289_Photodegradation_Efficiencies_of_MIL-53Al_of_Dyes/links/61f0ff325779d35951d48930/Photodegradation-Efficiencies-of-MIL-53Al-of-Dyes.pdf
7. Michael Akrofi Anang, Ruphino Zugle, Baah Sefa- Ntiri (2020). Assessing the Adsorptive and Photodegradative Efficiencies of ZSM-11 Synthesized from Rice Husk Ash. *Journal of Chemistry*. <https://doi.org/10.1155/2020/6094126>
8. Michael Akrofi Anang, Ruphino Zugle, Baah Sefa- Ntiri (2020). Comparing the Efficiencies of the Removal of Cadmium from Industrial Wastewater Using Zeolites. *International Research Journal of Pure and Applied*

9. Michael Akrofi Anang, Daniel Doodoo, Baah-Sefa Ntiri, Ruphino Zugle, Gertrude Ellen Fynn (2020). Improving the Quality of Locally Produced Vegetable Oils in Ghana Using Zeolite ZSM-11. *Chemical Science International Journal*. <https://doi.org/10.9734/csji/2019/v28i430150>
10. Aba Akebi Atta-Eyson, Samuel Tetteh, Ruphino Zugle (2020). Photocatalytic degradation of azo reactive dyes with ultraviolet and sunlight irradiated zinc oxide. <https://doi.org/10.22034/fcr.2020.118439.1015>
11. Samuel Tetteh, Ruphino Zugle, Albert Ofori, John Prosper Kwaku Adotey (2019). Kinetics and Equilibrium Thermodynamic Studies of the Adsorption of Phenolphthalein and Methyl Orange onto Muscovite Clay. <https://doi.org/10.22034/fcr.2020.122175.1017>
12. Samuel Tetteh, Anna Monney, Ruphino Zugle, Joseph Kweku Adjei (2019). Quantification of Imipramine, Amitriptyline and their Major Metabolites in Urine Samples of Depressed Patients by Gas Chromatography-Mass Spectrometry. <https://doi.org/10.22034/fcr.2019.37149>
13. Samuel Tetteh, Ruphino Zugle, John Prosper Kwaku Adotey, Andrews Quashie (2018). Electronic Spectra of ortho-Substituted Phenols: An Experimental and DFT Study. *Journal of Spectroscopy*. <https://doi.org/10.1155/2018/4193657>
14. Samuel Tetteh, Ruphino Zugle (2017). Theoretical Study of Terminal Vanadium(V) Chalcogenido Complexes Bearing Chlorido and Methoxido Ligands. *Journal of Chemistry*. <https://doi.org/10.1155/2017/6796321>
15. Ruphino Zugle, Samuel Tetteh (2016). Changes in the Spectral Features of Zinc Phthalocyanine Induced by Nitrogen Dioxide Gas in Solution and in Solid Polymer Nanofiber Media. *Journal of Fluorescence*. <https://doi.org/10.1007/s10895-016-2006-x>
16. Ruphino Zugle (2014). Fluorescent and photosensitizer characteristics of quarternised zinc phthalocyanine functionalised on polystyrene polymer nanofiber. *Journal of Basic & Applied Sciences*.
17. Annelies Goethals, Tawanda Mugadza, Yasin Arslanoglu, Ruphino Zugle, Edith Antunes, Stijn W. H. Van Hulle, Tebello Nyokong, Karen De Clerck (2014). Polyamide nanofiber membranes functionalized with zinc phthalocyanines. *Journal of Applied Polymer Science*. <https://doi.org/10.1002/app.40486>
18. Sheriff Adewuyi, Dezzline A. Ondigo, Ruphino Zugle, Zenixole Tshentu, Tebello Nyokong, Nelson Torto (2012). A highly selective and sensitive pyridylazo-2-naphthol-poly(acrylic acid) functionalized electrospun nanofiber fluorescence "turn-off" chemosensory system for Ni²⁺. *Analytical Methods*. <https://doi.org/10.1039/c2ay25182e>
19. Ruphino Zugle, Tebello Nyokong (2012). Comparative phototransformation of environmental pollutants using metallophthalocyanines supported on electrospun polymer fibers. *Journal of Applied Polymer Science*. <https://doi.org/10.1002/app.38381>
20. Bert De Schoenmaker, Lien Van der Schueren, Ruphino Zugle, Annelies Goethals, Philippe Westbroek, Paul Kiekens, Tebello Nyokong, Karen De Clerck (2012). Effect of the relative humidity on the fibre morphology of polyamide 4.6 and polyamide 6.9 nanofibres. *Journal of Materials Science*. <https://doi.org/10.1007/s10853-012-6934-9>
21. Ruphino Zugle, Tebello Nyokong (2012). Electrospun Polyacrylic Acid Polymer Fibers Functionalized with Metallophthalocyanines for Photosensitizing and Gas Sensing Applications. *Journal of Macromolecular Science Part A*. <https://doi.org/10.1080/10601325.2012.662006>
22. Ruphino Zugle, Tebello Nyokong (2012). Physico-chemical properties of lutetium phthalocyanine complexes in solution and in solid polystyrene polymer fibers and their application in photoconversion of 4-nitrophenol. *Journal of Molecular Catalysis A Chemical*. <https://doi.org/10.1016/j.molcata.2012.02.010>
23. Ruphino Zugle, Tebello Nyokong (2012). Zinc(II) 2,9,16,23-tetrakis[4-(N-methylpyridyloxy)]-phthalocyanine anchored on an electrospun polysulfone polymer fiber: Application for photosensitized conversion of methyl orange. *Journal of Molecular Catalysis A Chemical*. <https://doi.org/10.1016/j.molcata.2012.10.001>
24. Ruphino Zugle, Edith Antunes, Samson Khene, Tebello Nyokong (2011). Photooxidation of 4-chlorophenol sensitized by lutetium tetraphenoxo phthalocyanine anchored on electrospun polystyrene polymer fiber. *Polyhedron*. <https://doi.org/10.1016/j.poly.2011.11.005>

25. Ruphino Zugle, Christian Litwinski, Nelson Torto, Tebello Nyokong (2011). Photophysical and photochemical behavior of electrospun fibers of a polyurethane polymer chemically linked to lutetium carboxyphenoxy phthalocyanine. *New Journal of Chemistry*. <https://doi.org/10.1039/c1nj20126c>
26. Ruphino Zugle, Christian Litwinski, Tebello Nyokong (2011). Photophysical characterization of dysprosium, erbium and lutetium phthalocyanines tetrasubstituted with phenoxy groups at non-peripheral positions. *Polyhedron*. <https://doi.org/10.1016/j.poly.2011.03.030>
27. of Physical Chemistry Ruphino Zugle (2011). The inhibitory effect of phytate on the bioavailability of calcium, iron and zinc in raw commonly consumed sorghum and maize cultivars. *Elixir Food Science*.
28. Samuel Tetteh, Adem A. Golow, David K. Essumang, Ruphino Zugle (2010). Levels of Mercury, Cadmium, and Zinc in the Topsoil of Some Selected Towns in the Wassa West District of the Western Region of Ghana. *Soil and Sediment Contamination An International Journal*. <https://doi.org/10.1080/15320383.2010.515626>
29. Victor P. Y. Gadzekpo 23. Ruphino Zugle (2008). Studies of the spectral characteristics of copper (II) complex of thioctic acid. *Journal of Natural Science*.
30. R. Zugle, J. Kambo-Dorsa, V. P. Y. Gadzekpo (2007). An active transport mimetic system based on thioctic acid as carrier for alkaline earth metal ions. *Journal of the Iranian Chemical Society*. <https://doi.org/10.1007/bf03245803>
31. Victpr P. Y. Gadzekpo Ruphino Zugle (2006). Carrier- facilitated transport of potassium ions across chloroform membrane. *Journal of Ghana Chemical Society*.
32. R Zugle (2003). Detection of metal ions using ion-channel sensor based on self-assembled monolayer of thioctic acid. *Talanta*. [https://doi.org/10.1016/s0039-9140\(03\)00377-1](https://doi.org/10.1016/s0039-9140(03)00377-1)

Reports 1

1. Ruphino Zugle (2023). Experimental Crystal Structure Determination. *CSD Communication*.

Theses 1

1. RUPHINO Zugle (2012). Phototransformation of pollutants using lutetium and zinc phthalocyanines anchored on electrospun polymer fibers. *Rhodes University*. <https://www.academia.edu/download/80823023/SOURCEPDF.pdf>