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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*

Chemistry. https://doi.org/10.9734/irjpac/2020/v21i530166

9. Michael Akrofi Anang, Daniel Dodoo, 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-Eyison, 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 photosensitiser 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 tetraphenoxy 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. Gadzepco (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

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