

Joshua B. Puplampu

Associate Professor · Biochemistry
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RESEARCH

Areas Materials Chemistry · Renewable Energy, Sustainability and the Environment · Catalysis · Molecular Biology · Plant Science · Biochemistry

RESEARCH SUMMARY

25	379	11	11	1.47	11%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 25 publications listed below, 2006–2025. Field-weighted impact is the mean over the 9 works scored for it; 1.00 is the world average for works of the same field, type and year. 1 of the 9 papers scored for it are among the world's most cited tenth for their field, type and year.

POSITIONS

Associate Professor 2021–present
Biochemistry, University of Cape Coast, Cape Coast, Ghana

EDUCATION AND QUALIFICATIONS

PhD 2015
Kazan Federal University, Kazan', Russia

PUBLICATIONS

Journal articles 21

- Williams Kweku Darkwah, Alfred Bekoe Appiagyei, Samuel Nartey Kofie, Samuel Twum Akrofi, Daniel Adjah Anang, Godfred Kwesi Teye, Joshua Buer Puplampu (2025). Single Atom and Nanocluster Photocatalysts for Hydrogen Peroxide Synthesis under Visible Light. *ACS Engineering Au*. <https://doi.org/10.1021/acsengineeringau.4c00017>
- Williams Kweku Darkwah, Alfred Bekoe Appiagyei, Joshua B. Puplampu, Jacob Otobil Bonsu (2023). Mechanistic Understanding of the Use of Single-Atom and Nanocluster Catalysts for Syngas Production via Partial Oxidation of Methane. *Langmuir*. <https://doi.org/10.1021/acs.langmuir.2c03271>
- Williams Kweku Darkwah, Alfred Bekoe Appiagyei, Joshua B. Puplampu (2023). Transforming the Petroleum Industry through Catalytic Oxidation Reactions vis-à-vis Preceramic Polymer Catalyst Supports. *ACS Omega*. <https://doi.org/10.1021/acsomega.2c07562>
- Ibrahim Luru Abdulai, Samuel Kojo Kwofie, Winfred Seth Gbewonyo, Daniel Boison, Joshua Buer Puplampu, Michael Buenor Adinortey (2021). Multitargeted Effects of Vitexin and Isovitexin on Diabetes Mellitus and Its Complications. *The Scientific World JOURNAL*. <https://doi.org/10.1155/2021/6641128>
- Adinas Oswald Kiviyro, Williams Kweku Darkwah, Robert Bofah-Buoh, Desmond Ato Koomson, Masso Kody Christelle Sandrine, Joshua Buer Puplampu (2021). Photocatalytic Reduction of Hexavalent Chromium (Cr 6+) Over BiOI Calcined at Different Temperature Under Visible Light Irradiation. *ChemistrySelect*. <https://doi.org/10.1002/slct.202101285>
- Williams Kweku Darkwah, Gideon Aidoo, Dickson Akoto, Kadri Alhassan, Buanya Beryl Adormaa, Joshua Buer Puplampu (2021). Proliferative activity of various grades and types of breast carcinoma using

AgNOR (Argyrophilic Nuclear Organizer Region) expression and its prognostic significance. *All Life*. <https://doi.org/10.1080/26895293.2021.1925356>

7. Williams Darkwah, J Puplampu (2020). High-performance liquid chromatography analysis and antioxidant activities of extract of *Azadirachta indica* (Neem) leaves. *Pharmacognosy Research*. <https://go.gale.com/ps/i.do?id=GALE%7CA613319031&sid=googleScholar&v=2.1&it=r&linkaccess=abs&issn=09764836&p=HRCA&sw=w>
8. Williams Kweku Darkwah, Desmond Ato Koomson, Nicholas Miwornunyuie, Matthew Nkoom, Joshua Buer Puplampu (2020). Review: phytochemistry and medicinal properties of *Solanum torvum* fruits. *All Life*. <https://doi.org/10.1080/26895293.2020.1817799>
9. Williams Kweku Darkwah, Masso Kody Christelle Sandrine, Buanya Beryl Adormaa, Godfred Kwesi Teye, Joshua Buer Puplampu (2020). Solar light harvest: modified d-block metals in photocatalysis. *Catalysis Science & Technology*. <https://doi.org/10.1039/c9cy02435b>
10. Joshua B Puplampu (2019). p-tert-Butylthiacalix[4]arenes containing guanidinium groups: synthesis and self-assembly into nanoscale aggregates. *Supramolecular Chemistry*. <https://doi.org/10.1080/10610278.2019.1628231>
11. Joshua B Puplampu (2017). Design and applications of supramolecular systems based on (thia) calixarene ammonium derivatives. *Supramolecular systems: chemistry, types and applications*. https://www.researchgate.net/profile/Antonio-Luque-4/publication/317756998_Supramolecular-metal-organic-frameworks-based-on-metal-nucleobase-entities/links/6193941761f0987720a0a58f/Supramolecular-metal-organic-frameworks-based-on-metal-nucleobase-entities.pdf#page=13
12. JB Puplampu (2017). Polyfunctional branched nitrogen-containing p-tert-butylthiacalix[4]arene derivatives as efficient agents for packaging calf thymus DNA. *Russian Chemical Bulletin*. <https://doi.org/10.1007/s11172-017-1917-2>
13. Joshua B Puplampu (2015). Polyammonium derivatives of (thia) calix [4] arene: synthesis and interaction with nucleic acids. *Advances in Chemistry Research*. https://www.researchgate.net/profile/Sundeep-Dhawan/publication/282996913_REDUCED_GRAPHENE_OXIDE_DIMENSIONALLY_CONTROLLED_FE2O3_COMPOSITE_-_A_SAFEGUARD_AGAINST_ELECTROMAGNETIC_RADIATIONS/links/5629ed5508ae22b170315f4d/REDUCED-GRAPHENE-OXIDE-DIMENSIONALLY-CONTROLLED-FE2O3-COMPOSITE-A-SAFEGUARD-AGAINST-ELECTROMAGNETIC-RADIATIONS.pdf#page=159
14. Joshua Puplampu (2015). p-tert-Butyl Thiacalix [4] arene Derivatives Functionalized in the Lower Rim with Bis (3-aminopropyl) amine: Synthesis and Interaction with DNA. *Makroheterocikly*. https://www.academia.edu/download/106512998/mhc140722s_0.pdf
15. Joshua Buer Puplampu (2014). Synthesis of new types of PAMAM-dendrimers based on p-tert-butylthiacalix [4] arene. *Butlerov Commun.,* https://butlerov.com/files/reports/2014/vol39/8/57/57-64-27_04_201524.pdf
16. Joshua B Puplampu (2014). Synthesis of p-tert-butylthiacalix [4] arenes functionalized with tris (2-aminoethyl) amine fragments at the lower rim and their interaction with model lipid membranes. *Macroheterocycles*. <https://cyberleninka.ru/article/n/synthesis-of-p-tert-butylthiacalix-4-arenes-functionalized-with-tris-2-aminoethyl-amine-fragments-at-the-lower-rim-and-their-interaction-with>
17. Joshua B. Puplampu (2014). Синтез новых типов ПАМАМ-дендримеров на основе п-трет-бутилтиакаликс [4] арена. *Бутлеровские сообщения*. <https://scholar.google.com/scholar?cluster=1637382665293336768&hl=en&oi=scholar>
18. Joshua B. Puplampu (2014). Синтез производных п-трет-бутилтиакаликс [4] арена, функционализированных по нижнему ободу фрагментами N-(2-гидроксиэтил) этилендиамина, в конфигурациях конус и 1, 3-альтернат *Бутлеровские сообщения*. <https://scholar.google.com/scholar?cluster=8547800592229518493&hl=en&oi=scholar>
19. Joshua B Puplampu (2012). Heteroditopic p-tert-butyl thiacalix[4]arenes for creating supramolecular self-assemblies by cascade or commutative mechanisms. *RSC advances*. <https://pubs.rsc.org/ra/article-abstract/2/9/3906/381868>

20. Joshua B Puplampu (2011). Cascade and commutative self-assembles of nanoscale three-component systems controlled by the conformation of thiacalix [4] arene. *Langmuir*. <https://doi.org/10.1021/la202536x>
21. Joshua Puplampu (2006). Synthetic receptors for transition metal cations–tetrahydrazides on the basis of p-tert-butylthiacalix [4] arene. *Mendeleev Communications*. <https://www.academia.edu/download/106513016/mc2006v016n05abeh00237720231012-1-59qnz.pdf>

Book chapters 3

1. Vitaliy V. Plemenkov, Dmitriy N. Shurpik, Alan A. Akhmedov, Joshua B. Puplampu, Ivan I. Stoikov (2020). Progress in studies on meroterpenoids. *Studies in natural products chemistry*. <https://doi.org/10.1016/b978-0-12-817903-1.00006-1>
2. Joshua B Puplampu (2016). Systems Based on Calixarenes as the Basis for the Creation of Catalysts and Nanocontainers. *Organic Nanoreactors*. <https://www.sciencedirect.com/science/article/pii/B9780128017135000045>
3. JB Puplampu (2012). Aminophosphonates: Synthesis and practical application. *Phosphorus: Properties, Health Effects and the Environment*. <https://scholar.google.com/scholar?cluster=4752858676553448767&hl=en&oi=scholar>

Reports 1

1. JB Puplampu (2017). Supramolecular systems: chemistry, types and applications. Hauppauge, NY. USA: Nova Publisher. <https://scholar.google.com/scholar?cluster=18155370170487225585&hl=en&oi=scholar>