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RESEARCH

Interests Teacher Education · Economics Education

Areas Education · Organic Chemistry · Information Systems · Gender Studies · Political Science and International Relations · Public Health, Environmental and Occupational Health

RESEARCH SUMMARY

63	910	17	26	3.52	32%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 63 publications listed below, 2007–2026. Field-weighted impact is the mean over the 50 works scored for it; 1.00 is the world average for works of the same field, type and year. 16 of the 50 papers scored for it are among the world's most cited tenth for their field, type and year.

POSITIONS

Lecturer

Institute of Education, University of Cape Coast, Cape Coast, Ghana

PUBLICATIONS

Journal articles 60

1. Valentina Arkorful, Francis Arthur, **Ernest Opoku**, Ayishatu Ameen, Iddrisu Salifu, Sharon Abam Nortey, Solomon Adjatey Tetteh (2026). AI literacy among basic school teachers in Ghana: A structural equation modelling analysis. *PLoS ONE*. <https://doi.org/10.1371/journal.pone.0347117>
2. Francis Arthur, Eric Boateng, **Ernest Opoku**, Francis Obeng Gyedu, Stanley Asare-Bediako, Emmanuel Quayson, Iddrisu Salifu, Emmanuel Rungson Attom, Sharon Abam Nortey (2026). Exploring Artificial Intelligence Anxiety Among Basic School Teachers in Ghana. *SAGE Open*. <https://doi.org/10.1177/21582440251410713>
3. Francis Obeng Gyedu, Peter Anti Partey, Francis Arthur, **Ernest Opoku** (2026). Gender, teaching experience, and ICT integration self-efficacy in economics classrooms: evidence from Ghanaian senior high schools. *Frontiers in Education*. <https://doi.org/10.3389/feduc.2026.1838740>
4. Bernard Yaw Sekyi Acquah, Francis Arthur, Peter Anti Partey, Emmanuel Quayson, Francis Obeng Gyedu, Silas Afutu Quaye, Dominic Winston Kaku, **Ernest Opoku**, Francis Mensah, Dorcas Frempong, Sharon Abam Nortey (2026). Predictors of continuous use intention of information communication technology among economics teachers in Ghana: a multi-analytical approach. *SN Social Sciences*. <https://doi.org/10.1007/s43545-026-01450-4>
5. Sharon Abam Nortey, Francis Arthur, Iddrisu Salifu, **Ernest Opoku**, Ibrahim Osumanu, Enoch Mensah Junior, Kyei Anane Ampofo, Dominic Owusu, Eric Boateng (2026). Psychological Capital, Subjective Well-Being and Professional Commitment Among Teachers: A Behavioural Mediation Model. *MultiPsych*. <https://doi.org/10.1002/mps2.70015>
6. Eric Anane, Roger Abogzuah Ayinselya, Esinam Ami Avornyo, Christopher Yaw Kwaah, **Ernest Opoku** (2026). Teachers experiences of implementing the standards based curriculum in Ghanaian basic schools. *Discover Education*. <https://doi.org/10.1007/s44217-026-01727-z>

7. Francis Arthur, **Ernest Opoku**, Christian Inkoom, Sheriff Dangimah Suradji, Mark Inkoom (2026). Where There Is Will, There Is AI : Linking Expectancy-Value Beliefs, Generative AI Use and Self-Regulated Learning Among Economics Students. *European Journal of Education*. <https://doi.org/10.1111/ejed.70743>
8. **Ernest Opoku**, Emmanuel Quayson, Francis Arthur, Iddrisu Salifu, Stanley Asare-Bediako, Emmanuel Rungson Attom, Eric Boateng, Sharon Abam Nortey (2025). Digital citizenship among economics students: the synergy of internet political activism, technical skills, critical perspective and networking agency. *Discover Education*. <https://doi.org/10.1007/s44217-025-00620-5>
9. Iddrisu Salifu, Francis Arthur, Bernard Yaw Sekyi Acquah, **Ernest Opoku**, Sharon Abam Nortey, Eric Boateng (2025). Exploring graduate students' use of generative artificial intelligence in Ghana: insights from an extended UTAUT2 model, PLS-SEM, IPMA and fsQCA. *Discover Education*. <https://doi.org/10.1007/s44217-025-00603-6>
10. Iddrisu Salifu, Francis Arthur, **Ernest Opoku**, Emmanuel Quayson, Eric Boateng, Emmanuel Rungson Attom, Stanley Asare-Bediako, Sharon Abam Nortey (2025). Gender disparities in digital citizenship: Insights from economics students in higher education. *Social Sciences & Humanities Open*. <https://doi.org/10.1016/j.ssaho.2025.102233>
11. Bernard Yaw Sekyi Acquah, Francis Arthur, Iddrisu Salifu, Enoch Mensah, **Ernest Opoku**, Sharon Abam Nortey, Solomon Adjatey Tetteh (2025). Modelling economics students' use of ChatGPT and academic performance: insights from self-determination theory and epistemic curiosity. *Discover Artificial Intelligence*. <https://doi.org/10.1007/s44163-025-00373-y>
12. **Ernest Opoku**, Dominic Owusu, Francis Arthur, Iddrisu Salifu, Emmanuel Quayson, Eric Boateng, Francis Obeng Gyedu, Stanley Asare-Bediako, Emmanuel Rungson Attom, Solomon Adjatey Tetteh, Sharon Abam Nortey, Ayishatu Ameen (2025). Profiling students' multiple intelligences approach in the learning of economics in a Ghanaian University. *Discover Education*. <https://doi.org/10.1007/s44217-025-00571-x>
13. **Ernest Opoku**, Dacoster Kwaku Boakye, Christina Dzirasah, Alexander Opoku-Danso (2024). Examining the Quality of Learning Environment of Sandwich Programmes in Ghana: A Case of Institute of Education. *African Journal of Empirical Research*. <https://doi.org/10.51867/ajernet.5.2.29>
14. **Ernest Opoku**, Emmanuel Manu Agyapong, Christiana Dzirasah (2024). Factors Responsible for Pupils' Low Academic Performance in Abura-Asebu-Kwamankese District, Ghana. *EAST AFRICAN JOURNAL OF EDUCATION AND SOCIAL SCIENCES*. <https://doi.org/10.46606/eajess2024v05i01.0351>
15. Daniel Odoom, Christopher Dick-Sagoe, **Ernest Opoku**, Joseph Obeng-Baah (2024). Participatory communication in the provision of development services in the Ghanaian decentralised government system: evidence from the Central Region. *Discover Sustainability*. <https://doi.org/10.1007/s43621-024-00336-w>
16. **Ernest Opoku**, Guoyuan Sang, Christiana Dzirasah, Francis Adams (2024). Understanding Pre-Service Teachers' Identity Formation During Practicum: A Survey Study in Ghana. *Africa Education Review*. <https://doi.org/10.1080/18146627.2024.2402778>
17. Daniel Odoom, Eric Opoku Mensah, Christopher Dick-Sagoe, Ka Yiu Lee, **Ernest Opoku**, Joseph Obeng-Baah (2023). Examining the level of public awareness on the Sustainable Development Goals in Africa: An empirical evidence from Ghana. *Environment Development and Sustainability*. <https://doi.org/10.1007/s10668-023-02959-x>
18. **Ernest Opoku** (2023). Perceived Effects of Beginning Economics Teachers' Personality on the Students' Learning of Economics in Ghana. *INTERNATIONAL JOURNAL OF PEDAGOGY, POLICY AND ICT IN EDUCATION*.
19. **Ernest Opoku** (2023). Pre-Service Teachers' Perceptions of Identity Formation in Ghana. *African Journal of Empirical Research*. <https://doi.org/10.51867/ajernet.4.2.110>
20. Kennedy Acheampong*, **Ernest Opoku**, Edi Suryadi, Theodore Oduro -Okyireh (2023). The Correlates of Financial Dollarization in Ghana. *Jurnal Ilmu Keuangan dan Perbankan (JIKA)*. <https://doi.org/10.34010/jika.v12i2.9819>
21. Abigail Owusuwaa Gyamfi, Christopher Amoah Nyame, **Ernest Opoku** (2022). Halogenation lowers the electron affinity: A novel approach to design superalkali cationic clusters. *Chemical Physics Letters*. <https://doi.org/10.1016/j.cpl.2022.321111>

22. Abel Idrice Adjieufack, Jean Moto Ongagna, Ariane Pouyewo Tenambo, Ernest Opoku, Ibrahim Ndassa Mbouombouo (2022). How a Chromium Tricarbonyl Complex Catalyzes the [3 + 2] Cycloaddition Reaction of N-Substituted Phenylnitrones with Styrene: A Molecular Electron Density Theory Analysis. *Organometallics*. <https://doi.org/10.1021/acs.organomet.2c00394>
23. Ernest Opoku (2022). Pre-service teachers' perspectives on the use of information and communication technology: A case study of Berekum College of education. *International Journal of Educational Research and Studies*.
24. Christine Adu-Yeboah, Christopher Yaw Kwaah, Roger Abogzuah Ayinselya, Ernest Opoku (2022). Students' Career Aspirations and Pedagogical Experiences in Ghanaian Universities. *Journal of Educational Development and Practice*. <https://doi.org/10.47963/jedp.v6i.1468>
25. Eric Atta Quainoo, Ruby Aggrey, Derrick Aggrey, Francis Adams, Ernest Opoku, Zakaria Wanzam Abubakari (2022). The Impact of Globalization on Education: A Blessing or a Curse. *Education Journal*. <https://doi.org/10.11648/j.edu.20221102.13>
26. Ernest Opoku (2022). What Makes Quality Teaching? Review of Related Literature. *International Journal of Social Science and Humanities Research*. https://www.academia.edu/download/110919182/What_Makes_Quality_Teaching-01062022-1.pdf
27. Daniel Odoom, Lawrencia Agyepong, Francis Kojo Mensah, Ernest Opoku, Yaw Owusu Amoabeng (2021). Challenges associated with the delivery of development projects within the decentralised government system: views of selected stakeholders in the Shama District, Ghana. *Journal of Development and Communication Studies*. <https://doi.org/10.4314/jdcs.v8i2.3>
28. Ernest Opoku (2021). Learning experiences of foreign students in a Chinese university: the perception of international students of Beijing Institute of Fashion and Technology (BIFT). *INTERNATIONAL JOURNAL FOR INNOVATIVE RESEARCH IN MULTIDISCIPLINARY FIELD*.
29. Benedicta Donkor, Ernest Opoku, Albert Aniagyei (2021). Theoretical studies on cycloaddition reactions of N-allyl substituted polycyclic Isoindole-1,3-dione with nitrones and nitrile oxides. *Computational and Theoretical Chemistry*. <https://doi.org/10.1016/j.comptc.2021.113574>
30. Daniel Aboagye Akuamoah, Ernest Opoku, Richard Tia, Evans Adei (2020). 1,3-Dipolar cycloaddition reaction of indoles with tosyl azide, subsequent dehydroaromatization and ring-opening cascade: a computational study. *Theoretical Chemistry Accounts*. <https://doi.org/10.1007/s00214-020-02653-5>
31. Daniel Odoom, Ernest Opoku, Edward Gyamfi (2020). Ballot Paper Wastage in Elections in Ghana: Reflections of Electoral Commission Officers and Voters in the Jaman South District. *International Journal of Technology and Management Research*. <https://doi.org/10.47127/ijtmr.v1i4.34>
32. Eric Atta Quainoo, Frank Quansah, Francis Adams, Ernest Opoku (2020). Comparative Review of Educational Reforms, Policies, and Systems: A case of China and Ghana.
33. Ernest Opoku (2020). Examining teacher preparation and on-the-job experience: The gap of theory and practice. *International Journal of Research*. https://www.researchgate.net/profile/Ernest-Opoku-3/publication/342704667_Examining_teacher_preparation_and_on-the-job_experience_The_gap_of_theory_and_practice/links/5f030b43299bf1881603ab79/Examining-teacher-preparation-and-on-the-job-experience-The-gap-of-theory-and-practice.pdf
34. Abdullahi Tunde Aborode, Benedicta Donkor, Gyamfi Abigail Owusuwaa, Ernest Opoku (2020). Isotherms, Kinetics, Equilibrium, and Thermodynamic Studies on the Uptake of Hexavalent Chromium Ions from Aqueous Solution Using Synthetic Hydroxyapatite. <https://doi.org/10.22034/ajcb.2020.113974>
35. Ernest Opoku, George Baffour Pipim, Richard Tia, Evans Adei (2020). Mechanistic study of the tandem intramolecular (4 + 2)/intermolecular (3 + 2) cycloaddition reactions for the formation of polyaza- and polyisoxazolidine-steroids. *Journal of Heterocyclic Chemistry*. <https://doi.org/10.1002/jhet.3900>
36. George Baffour Pipim, Ernest Opoku, Richard Tia, Evans Adei (2020). Peri-, Chemo-, Regio-, Stereo- and Enantio-Selectivities of 1,3-dipolar cycloaddition reaction of C,N-Disubstituted nitrones with disubstituted 4-methylene-1,3-oxazol-5(4H)- one: A quantum mechanical study. *Journal of Molecular Graphics and Modelling*. <https://doi.org/10.1016/j.jmgm.2020.107542>

37. Ernest Opoku (2020). Progress on Homogeneous Ruthenium Complexes for Water Oxidation Catalysis: Experimental and Computational Insights. *Journal of Chemical Reviews*. <https://doi.org/10.22034/jcr.2020.108426>
38. Richard O Phillips, Jérôme Robert, Kabiru Mohamed Abass, William Thompson, Fred Stephen Sarfo, Tuah Wilson, Godfred Sarpong, Thierry Gateau, Annick Chauty, Raymond Omollo, ... Ernest Opoku and 59 others (2020). Rifampicin and clarithromycin (extended release) versus rifampicin and streptomycin for limited Buruli ulcer lesions: a randomised, open-label, non-inferiority phase 3 trial. *The Lancet*. [https://doi.org/10.1016/s0140-6736\(20\)30047-7](https://doi.org/10.1016/s0140-6736(20)30047-7)
39. Ernest Opoku, Grace Arhin, George Baffour Pipim, Anita Houston Adams, Richard Tia, Evans Adei (2020). Site-, enantio- and stereo-selectivities of the 1,3-dipolar cycloaddition reactions of oxanorbornadiene with C,N-disubstituted nitrones and dimethyl nitrilimines: a DFT mechanistic study. *Theoretical Chemistry Accounts*. <https://doi.org/10.1007/s00214-019-2529-8>
40. Grace Arhin, Anita Houston Adams, Ernest Opoku, Richard Tia, Evans Adei (2019). 1, 3-Dipolar cycloaddition reactions of selected 1,3-dipoles with 7-isopropylidenenorbornadiene and follow-up thermolytic cleavage: A computational study. *Journal of Molecular Graphics and Modelling*. <https://doi.org/10.1016/j.jmgm.2019.08.004>
41. Ernest Opoku, Richard Tia, Evans Adei (2019). Computational studies on [4 + 2] / [3 + 2] tandem sequential cycloaddition reactions of functionalized acetylenes with cyclopentadiene and diazoalkane for the formation of norbornene pyrazolines. *Journal of Molecular Modeling*. <https://doi.org/10.1007/s00894-019-4056-x>
42. Ernest Opoku, Richard Tia, Evans Adei (2019). DFT mechanistic study on tandem sequential [4 + 2]/[3 + 2] addition reaction of cyclooctatetraene with functionalized acetylenes and nitrile imines. *Journal of Physical Organic Chemistry*. <https://doi.org/10.1002/poc.3992>
43. Daniel Roland, Jamin Nathaniel Haleegoah, Ernest Opoku, Richard Tia, Evans Adei (2019). Mechanistic studies on tandem cascade [4 + 2]/ [3 + 2] cycloaddition of 1,3,4-oxadiazoles with olefins. *Journal of Molecular Graphics and Modelling*. <https://doi.org/10.1016/j.jmgm.2019.107452>
44. Ernest Opoku, Richard Tia, Evans Adei (2019). Quantum chemical studies on the mechanistic aspects of tandem sequential cycloaddition reactions of cyclooctatetraene with ester and nitrones. *Journal of Molecular Graphics and Modelling*. <https://doi.org/10.1016/j.jmgm.2019.06.019>
45. Joseph Bortey Borketey, Ernest Opoku, Richard Tia, Evans Adei (2019). The mechanisms of gallium-catalysed skeletal rearrangement of 1,6-enynes – Insights from quantum mechanical computations. *Journal of Molecular Graphics and Modelling*. <https://doi.org/10.1016/j.jmgm.2019.107476>
46. Ernest Opoku (2018). Appreciating the Challenge of Community Participation in Ngoled Development Interventions: An Analysis of Some Existing Literature. *International Journal in Management and Social Science*. <https://indianjournals.com/article/ijmss-6-10-003>
47. Daniel Odoom, Francis Kojo Mensah, Ernest Opoku, Yaw Owusu Amoabeng (2018). Sustaining Development Projects within the Local Government System in Ghana: Exploring the Views of Local Authorities and Other Stakeholders in Shama District. *International Journal of Innovative Research and Development*. <https://doi.org/10.24940/ijird/2018/v7/i12/dec18011>
48. Ernest Opoku (2017). Exploring the staff development challenges and strategies at Agogo College of Education, Ghana. *International Journal Of Innovative Research & Development*. https://www.researchgate.net/profile/Daniel-Odoom/publication/334459250_Exploring_the_Staff_Development_Challenges_and_Strategies_at_Agogo_College_of_Education_Ghana/links/5d2c50c6299bf1547cb7e2eb/Exploring-the-Staff-Development-Challenges-and-Strategies-at-Agogo-College-of-Education-Ghana.pdf
49. Ernest Opoku (2017). Participation of Women in Local Level Elections in the Afigya-Kwabre District of Ghana: Can this be a better example? *International Journal of Innovative Research and Development*. https://www.researchgate.net/profile/Daniel-Odoom/publication/334465499_Participation_of_Women_in_Local_Level_Elections_in_the_Afigya-Kwabre_District_of_Ghana_Can_this_be_a_Better_Example/links/5d2c7504458515c11c31adc8/Participation-of-Women-in-Local-Level-Elections-in-the-Afigya-Kwabre-District-of-Ghana-Can-this-be-a-

50. Ernest Opoku (2016). Staff development needs at the Colleges of Education in Ghana: Evidence from the Agogo College. *International Journal of Innovative Research and Development*. https://www.researchgate.net/profile/Daniel-Odoom/publication/334465905_Staff_Development_Needs_at_the_Colleges_of_Education_in_Ghana_Evidence_from_the_Agogo_College/links/5d2c8771a6fdcc2462e13b3f/Staff-Development-Needs-at-the-Colleges-of-Education-in-Ghana-Evidence-from-the-Agogo-College.pdf
51. Ernest Opoku (2016). Teacher motivation and performance: The case of some selected Early Childhood Care and Education Centres in the Cape Coast Metropolis of Ghana. *International Journal of Innovative Research and Development*. https://www.researchgate.net/profile/Daniel-Odoom/publication/334465913_Teacher_Motivation_and_Performance_The_Case_of_Some_Selected_Early_Childhood_Care_and_Education_Centres_in_the_Cape_Coast_Metropolis_of_Ghana/links/5d2c88c0458515c11c31b5d9/Teacher-Motivation-and-Performance-The-Case-of-Some-Selected-Early-Childhood-Care-and-Education-Centres-in-the-Cape-Coast-Metropolis-of-Ghana.pdf
52. Ernest Opoku, Richard Tia, Evans Adei (2016). [3 + 2] versus [2 + 2] Addition: A Density Functional Theory Study on the Mechanistic Aspects of Transition Metal-Assisted Formation of 1,2-Dinitrosoalkanes. *Journal of Chemistry*. <https://doi.org/10.1155/2016/4538696>
53. E Opoku (2015). Ballot paper wastage in elections in Ghana: reflections of Electoral Commission Officers and Voters in the Jaman South District. *International Journal of Technology and Management Research*.
54. Kathrin Schuldt, Jennifer Evans, Julia Lenzen, Christa Ehmen, Birgit Muntau, Jurgen Sievertsen, Yeetey Enuameh, Kingsley Osei-Kwakye, Ernest Cudjoe Opoku, Edmund NL Browne, Rolf Horstmann, Christian Timmann (2014). Disentangling malaria anaemia. *Malaria Journal*. <https://doi.org/10.1186/1475-2875-13-s1-o21>
55. Mary N. A. Brantuo, Elizabeth Cristofalo, Mira M. Meheš, Juliana Ameh, Nana Okai Brako, Frederick Boahene, Stella B. Adjei, Ernest Opoku, Harriet Banda, Yu T. Wang and 15 others (2014). Evidence-based training and mentorship combined with enhanced outcomes surveillance to address the leading causes of neonatal mortality at the district hospital level in Ghana. *Tropical Medicine & International Health*. <https://doi.org/10.1111/tmi.12270>
56. Daniel Odoom, Christian Kyeremeh, Ernest Opoku (2014). Human Resource Capacity Needs at the District Assemblies: A Study at Assin South District Assembly in Ghana. *Journal of Sustainable Development*. <https://doi.org/10.5539/jsd.v7n5p177>
57. P. A. Afulani, J. K. Awoonor-Williams, E. C. Opoku, J. Asunka (2012). Using community health workers in community-based growth promotion: what stakeholders think. *Health Education Research*. <https://doi.org/10.1093/her/cys083>
58. R. Kobbe, C. Kreuzberg, S. Adjei, B. Thompson, I. Langefeld, P. A. Thompson, H. H. Abruquah, B. Kreuels, M. Ayim, W. Busch, F. Marks, K. Amoah, E. Opoku, C. G. Meyer, O. Adjei, J. May (2007). A Randomized Controlled Trial of Extended Intermittent Preventive Antimalarial Treatment in Infants. *Clinical Infectious Diseases*. <https://doi.org/10.1086/518575>
59. Christian Timmann, Jennifer A Evans, Inke R König, André Kleensang, Franz Rüschendorf, Julia Lenzen, Jürgen Sievertsen, Christian Becker, Yeetey Enuameh, Kingsley Osei Kwakye, Ernest Opoku, Edmund N. L. Browne, Andreas Ziegler, Peter Nürnberg, Rolf D Horstmann (2007). Genome-Wide Linkage Analysis of Malaria Infection Intensity and Mild Disease. *PLoS Genetics*. <https://doi.org/10.1371/journal.pgen.0030048>
60. Robin Kobbe, Samuel Adjei, Christina Kreuzberg, Benno Kreuels, Benedicta Thompson, Peter A Thompson, Florian Marks, Wibke Busch, Meral Tosun, Nadine Schreiber, Ernest Opoku, Ohene Adjei, Christian G Meyer, Juergen May (2007). Malaria incidence and efficacy of intermittent preventive treatment in infants (IPTi). *Malaria Journal*. <https://doi.org/10.1186/1475-2875-6-163>

Book chapters 1

1. Francis Arthur, Ernest Opoku, Francis Obeng Gyedu, Silas Afutu Quaye, Emmanuel Quayson, Eric Boateng, Sharon Abam Nortey, Dorcas Frempong (2026). Integrating AI Literacy Into Higher Education Curricula. *Advances in computational intelligence and robotics book series*. <https://doi.org/10.4018/979-8-3373-7902-9.ch004>

Reports 2

1. Ernest Opoku, Emmanuel Ofori (2015). SANDWICH STUDENTS' ATTITUDE TOWARDS THE SANDWICH PROGRAMME. *University of Cape Coast*. <https://ir.ucc.edu.gh/server/api/core/bitstreams/1aeccc9c-2e62-4be7-84b1-070ae509b960/content>
2. Ernest Opoku (2014). Local revenue mobilization mechanisms: evidence from the Abura-Asebu-Kwamankese District in Ghana. *Developing Country Studies*. <https://www.academia.edu/download/86811524/19092.pdf>