Ms. Esther Nartey

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Google Scholar scholar.google.com/citations?user=p5KGqM8AAAAJ&hl=en · Profile uew.peerford.com/staff/a0a1dd8f-9281-43ff-bd13-e977d23f24cd

RESEARCH

Interests	Chemistry education · STEM education · Sustainability · Green chemistry
Areas	Biomaterials · Education · Physical and Theoretical Chemistry · Polymers and Plastics · Automotive Engineering

RESEARCH SUMMARY

12	21	2	1	0.79	25%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 12 publications listed below, 2016–2026. Field-weighted impact is the mean over the 4 works scored for it; 1.00 is the world average for works of the same field, type and year. 1 of the 4 papers scored for it are among the world's most cited tenth for their field, type and year.

PUBLICATIONS

Journal articles 9

1. **Esther Nartey**, Ruby Hanson (2026). Leveraging indigenous materials for chemistry education: The use of improvised ball-and-stick models in teaching hydrocarbons. *African Journal of Chemical Education*. https://www.ajol.info/index.php/ajce/article/view/334034/313815
2. **Esther Nartey** (2025). Representing the Invisible: A Study of Students' Visual and Conceptual Conceptions of Intermolecular Forces. *International journal of research and innovative development*.
3. Ernest Koranteng, Yunguo Liu, **Esther Nartey**, Fangqing Weng, Qiangxian Wu (2025). Sustainable Compatible Packaging Films From Biodegradable Poly(butylene adipate-co-terephthalate)/Sweet Potato Starch Composite: Structure and Properties. *Starch - Stärke*. https://doi.org/10.1002/star.70099
4. Ernest Koranteng, Huiqi Long, **Esther Nartey**, Kui Jian, Weng Fangqing, Qiangxian Wu (2025). Toughening Eco-Friendly PLA With a Castor Oil-Based Polyurethane Prepolymer: Application in 3D Printing. *Journal of Applied Polymer Science*. https://doi.org/10.1002/app.57729
5. **Esther Nartey**, Ernest Koranteng, Emmanuel Kyame Oppong, Ruby Hanson (2024). Analysis of undergraduate chemistry students' responses to substitution reaction mechanisms: a road to mastery. *Chemistry Teacher International*. https://doi.org/10.1515/cti-2023-0075
6. Kwarteng Twumasi, **E Nartey**, A Sam, R Hanson (2023). Chemistry students' knowledge and practices of chemical waste management in chemistry laboratories. *African Journal of Chemical Education*. https://www.ajol.info/index.php/ajce/article/view/251868
7. **Esther Nartey** (2021). Teacher Trainees' Alternative Conceptions about Intermolecular Forces. *International Journal of Innovative Science and Research Technology*.
8. **Esther Nartey**, Ruby Hanson (2021). The The perceptions of Senior High School students and teachers about organic chemistry: A Ghanaian perspective. *Science education international*. https://doi.org/10.33828/sei.v32.i4.8
9. **Esther Nartey**, Ruby Hanson (2021). The differential perceptions of selected Ghanaian Senior High School (SHS) students and teachers about organic chemistry. *African Journal of Chemical Education*. https://scholar.google.com/scholar?cluster=5045199667813901 95&hl=en&oi=scholarr

Theses 3

1. **ESTHER DORCAS Nartey** (2021). Comparative analysis of the peer tutoring and traditional methods in teaching selected topics in general biology. *University of Education, Winneba*. https://ir.uew.edu.gh/handle/123456789/2670
2. **ESTHER Nartey** (2020). Senior High School students' and teachers' perceptions about organic chemistry a case study in Asikuma Odoben Brakwa District. *University of Education, Winneba*. https://ir.uew.edu.gh/handle/123456789/3549
3. **ED Nartey** (2016). Comparative analysis of concept mapping and traditional methods in teaching selected topics in biology. *University of Education, Winneba.(UEW)*. https://ir.uew.edu.gh/handle/123456789/1752