

Elvis Awuni

Senior Lecturer · Biochemistry
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RESEARCH

Interests Computational Structural Biology · Computer-Aided Drug Discovery · MD Simulations · Docking/Virtual Screening · Biochemistry

Areas Molecular Biology · Computational Theory and Mathematics · Ecology · Microbiology · Genetics · Infectious Diseases

RESEARCH SUMMARY

12	117	5	4	0.47	0%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 12 publications listed below, 2015–2026. 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. 0 of the 9 papers scored for it are among the world's most cited tenth for their field, type and year.

POSITIONS

Senior Lecturer

Department of Biochemistry, University of Cape Coast, Cape Coast, Ghana

PUBLICATIONS

Journal articles 12

1. Albert Achirofi, Daniel Sakyi Agyirifo, Meshack Antwi-Adjei, **Elvis Awuni**, Francis Kwame Abrokwhah (2026). Combined antibacterial effects of turmeric and cinnamon ethanolic extracts with ampicillin against resistant-microbial strains: in vitro and molecular docking approaches. *Discover Applied Sciences*. <https://doi.org/10.1007/s42452-026-08319-4>
2. **Elvis Awuni** (2026). Unveiling nicotiflorin analogs with improved oral drug-like metrics as candidates for the development of dengue virus NS2B-NS3 protease inhibitors: An in silico study. *Journal of Chemical Research*. <https://doi.org/10.1177/17475198261469655>
3. **Elvis Awuni** (2025). An overview of drugging the bacterial cytoskeleton, rod, and divisome systems. *SLAS DISCOVERY*. <https://doi.org/10.1016/j.slasd.2025.100261>
4. **Elvis Awuni** (2025). Identification of lead small molecules for the design and development of potent severe acute respiratory syndrome coronavirus 2 main protease inhibitors. *Journal of Chemical Research*. <https://doi.org/10.1177/17475198251326083>
5. **Elvis Awuni** (2024). Evaluating the MreB-Binding Prospects of Proposed Antibacterial Peptides through Molecular Modeling and Simulations. *Journal of Computational Biophysics and Chemistry*. <https://doi.org/10.1142/s2737416524500558>
6. **Elvis Awuni**, Radiatu Abdallah Musah (2023). Proposing lead compounds for the development of SARS-CoV-2 receptor-binding inhibitors. *Journal of Biomolecular Structure and Dynamics*. <https://doi.org/10.1080/07391102.2023.2204505>
7. **Elvis Awuni** (2022). Modeling the MreB-CbtA Interaction to Facilitate the Prediction and Design of Candidate Antibacterial Peptides. *Frontiers in Molecular Biosciences*. <https://doi.org/10.3389/fmolb.2021.814935>

8. Elvis Awuni (2020). Status of Targeting MreB for the Development of Antibiotics. *Frontiers in Chemistry*. <https://doi.org/10.3389/fchem.2019.00884>
9. Elvis Awuni, Yuguang Mu (2019). Effect of A22 on the Conformation of Bacterial Actin MreB. *International Journal of Molecular Sciences*. <https://doi.org/10.3390/ijms20061304>
10. Elvis Awuni (2018). Proposing drug fragments for dengue virus NS5 protein. *Journal of Bioinformatics and Computational Biology*. <https://doi.org/10.1142/s0219720018400176>
11. Elvis Awuni (2016). Exploring the A22-bacterial actin MreB interaction through molecular dynamics simulations. *The Journal of Physical Chemistry B*. <https://doi.org/10.1021/acs.jpcc.6b05199>
12. Elvis Awuni (2015). Reduction of False Positives in Structure-Based Virtual Screening When Receptor Plasticity Is Considered. *Molecules*. <https://www.mdpi.com/1420-3049/20/3/5152>