Peter Twumasi

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RESEARCH

Interests	Biochemistry · Biotechnology · Sports
Areas	Genetics · Molecular Biology · Surgery · Plant Science · Ecology · Biotechnology

RESEARCH SUMMARY

30	524	12	14	1.24	13%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 30 publications listed below, 1979–2026. Field-weighted impact is the mean over the 16 works scored for it; 1.00 is the world average for works of the same field, type and year. 2 of the 16 papers scored for it are among the world's most cited tenth for their field, type and year.

PUBLICATIONS

Journal articles 28

1. Ayamdoo, J. A., Salifu, S. P., Gowans, L. J. J., **Twumasi, P.** (2026). Additional file 2 of Mitochondria dysfunctional diseases among African population since the discovery of mitochondrial pathologies: a systematic review. *Figshare*. https://doi.org/10.6084/m9.figshare.31166500
2. **Ir. Peter Twumasi**, LJJ Gowans (2023). Genomic analyses in African populations identify novel risk loci for cleft palate (vol 28, pg 1038, 2019). *HUMAN MOLECULAR GENETICS*. https://scholar.google.com/scholar?cluster=9116441167120888309&hl=en&oi=scholarr
3. AA Mantey, HE Lutterodt, **P Twumasi**, RA Annan (2022). Effect of 12 weeks consumption of palm weevil larvae and orange-fleshed sweet potato fortified biscuit on nutritional status and cognitive performance of school children in Kumasi, Ghana. *African Journal of Food Agriculture Nutrition and Development*. https://doi.org/10.18697/ajfand.113.21620
4. Lord J. J. Gowans, Noura Al Dhaheri, Mary Li, Tamara Busch, Solomon Obiri-Yeboah, Alexander A. Oti, Daniel K. Sabbah, Fareed K. N. Arthur, Waheed O. Awotoye, Azeez A. Alade, **Peter Twumasi**, Pius Agbenorku, Gyikua Plange-Rhule, Thirona Naicker, Peter Donkor, Jeffrey C. Murray, Nara L. M. Sobreira, Azeez Butali (2021). Co-occurrence of orofacial clefts and clubfoot phenotypes in a sub-Saharan African cohort: Whole-exome sequencing implicates multiple syndromes and genes. *Molecular Genetics & Genomic Medicine*. https://doi.org/10.1002/mgg3.1655
5. Afua Afreh Mantey, Reginald Adjetey Annan, Herman Erick Lutterodt, **Peter Twumasi** (2021). Iron status predicts cognitive test performance of primary school children from Kumasi, Ghana. *PLoS ONE*. https://doi.org/10.1371/journal.pone.0251335
6. KofiAdjapong Afrifah, Alexander Badu-Boateng, Samuel Antwi-Akomeah, EvaEmefa Motey, Emmanuel Boampong, **Peter Twumasi**, PaulPoku Sampene, Augustine Donkor (2020). Forensic identification of missing persons using DNA from surviving relatives and femur bone retrieved from salty environment. *Journal of Forensic Science and Medicine*. https://doi.org/10.4103/jfsm.jfsm_48_19
7. **Ir. Peter Twumasi** (2019). Use of morphological and molecular profiling for the establishment of relatedness between commercially available and elite soybean genotypes. *European Journal of Biotechnology and Genetic Engineering Vol*. https://www.academia.edu/download/81114385/Full-Paper-USE-OF-MORPHOLOGICAL-AND-MOLECULAR-PROFILING-FOR-THE-ESTABLISHMENT-OF-

RELATEDNESS.pdf

8. Alexander Badu-Boateng, **Peter Twumasi**, Samson Pandam Salifu, Kofi Adjapong Afrifah (2018). A comparative study of different laboratory storage conditions for enhanced DNA analysis of crime scene soil-blood mixed sample. *Forensic Science International*. https://doi.org/10.1016/j.forsciint.2018.09.007
9. Sylvester A. Obeng-Darko, Robert N Quaicoe, Egya N. Yankey, **Peter Twumasi** (2018). Comparative PCR analyses for the detection of the Cape St. Paul wilt disease phytoplasma in coconut palms in Ghana. *Journal of Phytopathology*. https://doi.org/10.1111/jph.12707
10. Azeez Butali, Peter A Mossey, Wasiu L Adeyemo, Mekonen A Eshete, Lord J J Gowans, Tamara D Busch, Deepti Jain, Wenjie Yu, Liu Huan, Cecelia A Laurie, … **Peter Twumasi** and 60 others (2018). Genomic analyses in African populations identify novel risk loci for cleft palate. *Human Molecular Genetics*. https://doi.org/10.1093/hmg/ddy402
11. Lord Jephthah Joojo Gowans, Solomon Obiri-Yeboah, Alexander Acheampong Oti, Fareed Kow Nanse Arthur, **Peter Twumasi**, Pius Agbenorku, Gyikua Plange-Rhule, Peter Donkor (2018). Non-Random Distribution of Human Orofacial Clefts in Ghana: Gene-Environment Interactions. *Open Journal of Stomatology*. https://doi.org/10.4236/ojst.2018.82004
12. M.A. Eshete, H. Liu, M. Li, W.L. Adeyemo, L.J.J Gowans, P.A. Mossey, T. Busch, W. Deressa, P. Donkor, P.B. Olaitan, … **P. Twumasi** and 26 others (2017). Loss-of-Function GRHL3 Variants Detected in African Patients with Isolated Cleft Palate. *Journal of Dental Research*. https://doi.org/10.1177/0022034517729819
13. Lord Jephthah Joojo Gowans, Tamara D. Busch, Peter A. Mossey, Mekonen A. Eshete, Wasiu L. Adeyemo, Babatunde Aregbesola, Peter Donkor, Fareed K. N. Arthur, Pius Agbenorku, James Olutayo, **Peter Twumasi**, Rahman Braimah, Alexander A. Oti, Gyikua Plange-Rhule, Solomon Obiri-Yeboah, Fikre Abate, Paa E. Hoyte-Williams, Taye Hailu, Jeffrey C. Murray, Azeez Butali (2017). The prevalence, penetrance, and expressivity of etiologic IRF 6variants in orofacial clefts patients from sub-Saharan Africa. *Molecular Genetics & Genomic Medicine*. https://doi.org/10.1002/mgg3.273
14. L.J.J. Gowans, W.L. Adeyemo, M. Eshete, P.A. Mossey, T. Busch, B. Aregbesola, P. Donkor, F.K.N. Arthur, S.A. Bello, A. Martinez, … **P. Twumasi** and 23 others (2016). Association Studies and Direct DNA Sequencing Implicate Genetic Susceptibility Loci in the Etiology of Nonsyndromic Orofacial Clefts in Sub-Saharan African Populations. *Journal of Dental Research*. https://doi.org/10.1177/0022034516657003
15. Jim K. M. Mensah, **Peter Twumasi** (2016). Use of pineapple waste for single cell protein (SCP) production and the effect of substrate concentration on the yield. *Journal of Food Process Engineering*. https://doi.org/10.1111/jfpe.12478
16. **P Twumasi**, K Nsiah (2013). Comparative study on diagnosis of urinary tract infection among adolescents in the Kumasi Metropolis using dipstick, culture and PCR methods. *Journal of Ghana Science Association*. https://ghanascience.gov.gh/wp-content/uploads/2018/03/7-1.pdf
17. I Oduro, **P Twumasi**, MA Tandoh, G Ankar-Brewoo (2013). Formulation and sensory evaluation of herb tea from Moringa oleifera, Hibiscus sabdariffa and Cymbopogon citratus. *J. Ghana Sci. Assoc*. https://ghanascience.gov.gh/wp-content/uploads/2018/03/6-1.pdf
18. **P Twumasi** (2013). Molecular characterization of cocoa, mango, banana and Yam isolates of Botryodiplodia theobromae in Ghana. *J Ghana Sci Assoc*. https://www.academia.edu/download/103853135/5-1.pdf
19. **P Twumasi** (2011). Genetic relationships between some released and elite Ghanaian cassava cultivars based on distance matrices. *African Journal of Biotechnology*. https://www.ajol.info/index.php/ajb/article/download/92654/82094
20. **P Twumasi** (2010). Caspase inhibitors affect the kinetics and dimensions of tracheary elements in xylogenic Zinnia (Zinnia elegans) cell cultures. *BMC Plant Biology*. https://doi.org/10.1186/1471-2229-10-162
21. **P Twumasi** (2010). Osmotic potential of Zinnia elegans plant material affects the yield and morphology of tracheary elements produced in vitro. *African journal of biotechnology*. https://www.academia.edu/download/91239287/175071.pdf

22. Faustina O. Mensah, **Peter Twumasi**, Xorse K. Amenawonyo, Christopher Larbie, Asomaning K. Baffo Jnr (2010). Pica practice among pregnant women in the Kumasi metropolis of Ghana. *International Health*. https://doi.org/10.1016/j.inhe.2010.09.004

23. **P. Twumasi**, J. H. N. Schel, W. Van Ieperen (2009). Differential effects of temperature on stem length and xylem vessel length distribution inZinnia elegans. *The Journal of Horticultural Science and Biotechnology*. https://doi.org/10.1080/14620316.2009.11512561

24. **Peter Twumasi**, Jan H.N. Schel, Wim Van Ieperen, Ernst Woltering, Olaf Van Kooten, Anne Mie C. Emons (2009). Establishing in vitro Zinnia elegans cell suspension culture with high tracheary element differentiation. *Cell Biology International*. https://doi.org/10.1016/j.cellbi.2009.01.019

25. **Ir. Peter Twumasi** (2009). Low-cost method for streamlining marker-assisted selection and breeding line development in rice (Oryza sativa L.). *International Journal of Genetics and Molecular Biology*. https://www.academia.edu/download/76082217/Low-cost_method_for_streamlining_marker-20211210-32749-aioth1.pdf

26. **P Twumasi** (2006). Manipulation of programmed cell death in xylogenic Zinnia elegans suspension cell cultures influences the kinetics and dimensions of tracheary elements produced. *Hydraulic properties of Zinnia elegans*. https://edepot.wur.nl/2277#page=117

27. **Ir. Peter Twumasi** (2003). Effects of water stress during growth on xylem anatomy, xylem functioning and vase life in three Zinnia elegans cultivars. *VIII International Symposium on Postharvest Physiology of Ornamental Plants 669*. https://www.actahort.org/books/669/669_40.htm

28. **P TWUMASI** (1979). PEOPLE OF THE ZOGO-THE TRANSFORMATION OF ETHNIC IDENTITIES IN GHANA-SCHILDKROUT, E. *JOURNAL OF ASIAN AND AFRICAN STUDIES*. https://scholar.google.com/scholar?cluster=5147645784875369418&hl=en&oi=scholarr

Reports 1

1. **Ir. Peter Twumasi**, LJJ Gowans (2019). Genomic analyses in African populations identify loci for cleft palate. *Oxford Academic*. https://scholar.google.com/scholar?cluster=17719283308745668804&hl=en&oi=scholarr

Theses 1

1. **P Twumasi** (2007). Hydraulic Properties of Zinnia Elegans : From Cellular Development in Vitro to Performance in Planta. *PQDT-Global*. https://search.proquest.com/openview/e6a4d6905e5625e903293e3adb869136/1?pq-origsite=gscholar&cbl=2026366&diss=y