Isaac Galyuon

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RESEARCH

Interests	Molecular Biology · Plant Genetics and Breeding · Plant Physiology · PCR Microbiology
Areas	Plant Science · Molecular Biology · Agronomy and Crop Science · Food Science · Horticulture · Nutrition and Dietetics

RESEARCH SUMMARY

36	757	13	15	2.28	39%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 36 publications listed below, 1999–2026. Field-weighted impact is the mean over the 18 works scored for it; 1.00 is the world average for works of the same field, type and year. 7 of the 18 papers scored for it are among the world's most cited tenth for their field, type and year.

PUBLICATIONS

Journal articles 35

1. Aaron T. Asare, Peter Haruna, **Isaac K. Galyuon**, Daniel Asante, Joshua Yeboah Asiamah (2026). Heterotic response and inbreeding depression in seed traits and other related attributes of cowpea (Vigna unguiculata [L.] Walp.). *Electronic Journal of Plant Breeding*. https://doi.org/10.37992/2026.1701.004
2. Jianbin Li, Michael Ackah, Frank Kwarteng Amoako, Justice Kwaku Addo, Xin Jin, Frank Kumi, Vailly Jubline Banzouzi Bouzika, Hao Wei, John Nelson Buah, **Isaac K.A. Galyuon**, Meina Zhu, Mengdi Zhao, Weiguo Zhao (2026). Magnesium-induced transporters remodel the ionome of mulberry leaves by promoting the nitrate reductase (NIA) gene in nitrogen metabolism. *Plant Science*. https://doi.org/10.1016/j.plantsci.2026.113396
3. Zipei Cui, Michael Ackah, Frank Kwarteng Amoako, Jianbin Li, Aaron Tettey Asare, Changyu Qiu, Qiang Lin, Owuraku Amponsah Abu, **Isaac K. A. Galyuon**, Xueying Jin, Mengdi Zhao, Weiguo Zhao (2026). Metabolomic and physiological responses of mulberry plants to exogenous molybdenum enhance amino acid and sugar metabolism. *Plant and Soil*. https://doi.org/10.1007/s11104-026-08495-7
4. Danquah Danquah, Emmanuel Plas Otwe, **Isaac Kojo Angnangsoore Galyuon**, Kofi Atiah, Clement Napo (2025). Growth and Tuberization in Seed-Propagated Cassava. *American Journal of Agriculture*. https://doi.org/10.47672/aja.2811
5. A. Danquah, E. P. Otwe, **I. K. A. Galyuon**, F. Kumi, C. Napo (2025). Morphological and Physiological Responses of Sorghum to Drought: Implications for Development of Climate-resilient Cultivars. *Biotechnology Journal International*. https://doi.org/10.9734/bji/2025/v29i2767
6. **Isaac Galyuon** (2024). Assessment of genetic diversity for yield, yield attributes and water use efficiency related traits in groundnut [Arachis hypogaea L.]. *Electronic Journal of Plant Breeding*. https://ejplantbreeding.org/index.php/EJPB/article/view/283
7. R. E. Puobi, A. T. Asare, E. P. Otwe, **I. K. A. Galyuon** (2023). Drought Tolerance in Soybean (Glycine max L. Merr.) Genotypes during the Flowering Stage of Development. *Journal of Advances in Biology & Biotechnology*. https://doi.org/10.9734/jabb/2023/v26i11663
8. Caleb M. Agbale, Justice K. Sarfo, **Isaac K. Galyuon**, Samuel A. Juliano, Gislaine G. O. Silva, Danieli F. Buccini, Marlon H. Cardoso, Marcelo D. T. Torres, Alfredo M. Angeles-Boza, Cesar de la Fuente-Nunez,

Octavio L. Franco (2019). Antimicrobial and Antibiofilm Activities of Helical Antimicrobial Peptide Sequences Incorporating Metal-Binding Motifs. *Biochemistry*. https://doi.org/10.1021/acs.biochem.9b00440

9. Daniel S. Agyirifo, Mark Wamalwa, Emmanuel Plas Otwe, **Isaac Galyuon**, Steven Runo, Jemmy Takrama, Joseph Ngeranwa (2019). Metagenomics analysis of cocoa bean fermentation microbiome identifying species diversity and putative functional capabilities. *Heliyon*. https://doi.org/10.1016/j.heliyon.2019.e02170
10. **I.K.A. Galyuon**, A. Gay, A.K. Borrell, C.J. Howarth (2019). Physiological and biochemical basis for stay-green trait in sorghum. *African Crop Science Journal*. https://doi.org/10.4314/acsj.v27i4.8
11. Aaron T. Asare, Bhavani Shankara Gowda, **Isaac Galyuon**, Lawrence M. Aboagye, Jemmy F. Takrama, Francis Kwame Padi, Michael P. Timko (2017). Identification of potential sources of striga resistance in cowpea [Vigna Unguiculata (L.) walp.] accessions from Ghana. *Journal of Microbiology and Biotechnology Research*.
12. Emmanuel Plas Otwe, Daniel S. Agyirifo, **Isaac K. Galyuon**, John S Heslop-Harrison (2017). Molecular Diversity in some Ghanaian Cowpea [Vigna unguiculata L. (Walp)] Accessions. *Tropical Plant Biology*. https://doi.org/10.1007/s12042-017-9184-9
13. E. Muller, S. Ravel, C. Agret, F. Abrokwah, H. Dzahini-Obiatey, **I. Galyuon**, K. Kouakou, E.C. Jeyaseelan, J. Allainguillaume, A. Wetten (2017). Next generation sequencing elucidates cacao badnavirus diversity and reveals the existence of more than ten viral species. *Virus Research*. https://doi.org/10.1016/j.virusres.2017.11.019
14. Caleb Mawuli Agbale, Marlon Henrique Cardoso, **Isaac Kojo Galyuon**, Octávio Luiz Franco (2016). Designing metallodrugs with nuclease and protease activity. *Metallomics*. https://doi.org/10.1039/c6mt00133e
15. Francis Abrokwah, Henry Dzahini-Obiatey, **Isaac Galyuon**, Francis Osae-Awuku, Emmanuelle Muller (2016). Geographical Distribution of Cacao swollen shoot virus Molecular Variability in Ghana. *Plant Disease*. https://doi.org/10.1094/pdis-01-16-0081-re
16. L Yafetto, **Isaac KA Galyuon** (2016). Towards genetically engineered crops in ghanaian agriculture: Confined field trials and the „next-door neighbor effect" theory. *AgBioForum*. http://agbioforum.org/wp-content/uploads/2021/02/AgBioForum-19-1-66.pdf
17. **Isaac Galyuon** (2015). Cadmium contamination of cocoa beans and cocoa growing agricultural soils of Ghana: There is no cause for public alarm. *Peak Journal of Public Health and Management*. https://scholar.google.com/scholar?cluster=16380540299486877581&hl=en&oi=scholarr
18. S Acheampong, **Isaac KA Galyuon**, AT Asare (2015). Effects of sterilization protocols, benzylaminopurine and type of explants on growth initiation of pineapple (Ananas comosus (L.) Merr.) cultures. *Journal of Basic & Applied Sciences*. https://www.researchgate.net/profile/Aaron-T-Asare/publication/295918449_Effects_of_sterilization_protocols_benzylaminopurine_and_type_of_explants_on_growth_initiation_of_pineapple_Ananas_comosus_L_Merr_cultures/links/56d07b4308ae4d8d64a38ec1/Effects-of-sterilization-protocols-benzylaminopurine-and-type-of-explants-on-growth-initiation-of-pineapple-Ananas-comosus-L-Merr-cultures.pdf
19. Caleb M Agbale, **Isaac K. Galyuon** (2015). Optimisation of antimicrobial peptide design: insights from action mechanisms. *Journal of Postdoctoral Research*. https://www.researchgate.net/profile/Isaac-Galyuon/publication/281392780_Optimization_of_antimicrobial_peptide_design_insights_from_action_mechanisms/links/5687b0a408aebccc4e1522ec/Optimization-of-antimicrobial-peptide-design-insights-from-action-mechanisms.pdf?_sg%5B0%5D=started_experiment_milestone&origin=journalDetail
20. **I Galyuon** (2013). Evaluation of Agronomic Performance of Drought-Tolerant QTL Introgression Hybrids of Millet (Pennisetum glaucum L R. Br.) in the Guinea Savannah Zone of Ghana. *International journal of agriculture sciences*. https://pdfs.semanticscholar.org/f10f/864b067eb3cbae30f4a88f085620b581f9de.pdf
21. AT Asare, **IKA Galyuon** (2013). Identification of potential sources of striga resistance in cowpea [Vigna unguiculata (L.) Walp.] accessions from Ghana. *Journal of Microbiology and Biotechnology Research*.

22. Michael Buenor Adinortey, Charles Ansah, **Isaac Galyuon**, Alexander Nyarko (2013). In VivoModels Used for Evaluation of Potential Antigastroduodenal Ulcer Agents. *Ulcers*. https://doi.org/10.1155/2013/796405
23. Aaron T. Asare, **Isaac Galyuon**, Francis Kwame Padi, Emmanuel Plas Otwe, Jemmy F. Takrama (2013). RESPONSES OF RECOMBINANT INBRED LINES OF COWPEA [(VIGNA UNGUICULATA (L.) WALP] TO STRIGA GESNERIOIDES INFESTATION IN GHANA. *European Scientific Journal ESJ*.
24. MichaelBuenor Adinortey, **IsaacK Galyuon**, NicholasOteng Asamoah (2013). Trema orientalis Linn. Blume: A potential for prospecting for drugs for various uses. *Pharmacognosy Reviews/Bioinformatics Trends/ Pharmacognosy review*. https://doi.org/10.4103/0973-7847.112852
25. J Aggrey-Fynn, **I Galyuon**, DW Aheto, I Okyere (2011). Assessment of the environmental conditions and benthic macroinvertebrate communities in two coastal lagoons in Ghana. *Annals of Biological Research*. https://www.academia.edu/download/79235170/Assessment_of_the_environmental_conditio20220121-24680-18z0ndx.pdf
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29. **Isaac KA Galyuon**, MB Adinortey (2011). The Ghanaian Currency notes and Coins: A Medium of Exchange for pathogenic microbes. *Journal of Ghana Science Association*. https://ir.ucc.edu.gh/server/api/core/bitstreams/1319d243-acc1-4d9f-b0c6-8c5e4484d55d/content
30. Aaron T. Asare, Bhavani S. Gowda, **Isaac K. A. Galyuon**, Lawrence L. Aboagye, Jemmy F. Takrama, Michael P. Timko (2010). Assessment of the genetic diversity in cowpea (Vigna unguiculataL. Walp.) germplasm from Ghana using simple sequence repeat markers. *Plant Genetic Resources*. https://doi.org/10.1017/s1479262110000092
31. **I Galyuon** (2008). The genetic control of senescence revealed by mapping quantitative trait loci. *Ann. Plant Rev. Senes. Proc. Plants*.
32. **I KA Galyuon** (2007). Effect of solar radiation on photosynthesis and pigmentation in the cyanobacterium microcoleus chtihonoplastes. *Journal of Ghana Science Association*. https://www.osti.gov/etdeweb/biblio/20927619
33. **IKA Galyuon** (2005). Functioning under drought stress of stay-green sorghum developed by marker-assisted selection. *Comparative Biochemistry and Physiology a-Molecular & Integrative Physiology*. https://www.researchgate.net/profile/Isaac-Galyuon/publication/376448542_Functioning_under_drought_stress_of_stay-green_sorghum_developed_by_marker-assisted_selection/links/65789047ea5f7f020564bcc6/Functioning-under-drought-stress-of-stay-green-sorghum-developed-by-marker-assisted-selection.pdf
34. **IKA Galyuon** (1999). Regulatory effects of cultar and iat siol treat on soybean (Glycine max (L) Merr.). *Journal of the Ghana Science Association*. https://www.ajol.info/index.php/jgsa/article/view/17965
35. **IKA Galyuon** (1999). Responses of stomates of talinum triangulare and tradescantia virginiana to some growth regulators. *Journal of the Ghana Science Association*. https://www.ajol.info/index.php/jgsa/article/view/18005/63123

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1. **Isaac K. A. Galyuon** (2005). Physiological, Biochemical and Molecular Characterisation of the Stay-green Trait in Sorghum [Sorghum bicolor (L.)Moench]. *University of Wales, Aberystwyth, Wales, UK*.