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RESEARCH

Interests	Mathematical statistics · spatial statistics · time series/regression analysis · optimization
Areas	Statistics and Probability · Global and Planetary Change · Management Science and Operations Research · Artificial Intelligence · Economics and Econometrics · Modeling and Simulation

RESEARCH SUMMARY

35	363	10	11	1.47	13%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 35 publications listed below, 2013–2026. Field-weighted impact is the mean over the 31 works scored for it; 1.00 is the world average for works of the same field, type and year. 4 of the 31 papers scored for it are among the world's most cited tenth for their field, type and year.

PUBLICATIONS

Journal articles 35

1. Amadou Cham, Nana Kena Frempong, Richard Opoku, Francis Davis, **Simon Kojo Appiah** (2026). The Impact of Renewable and Non-Renewable Energy on Economic Growth: Evidence From Sub-Saharan African Countries Using Multivariate Panel Vector Autoregressive Modeling. *Energy Science & Engineering*. https://doi.org/10.1002/ese3.70480
2. EGJO Ansah, **SK Appiah** (2024). ARMA and/or SETAR Estimation and Out-of-Sample Forecast of the Mean-Reversion Between Brent Crude Oil and Gasoline Prices on the Ghanaian Market. *Ratio Mathematica*. http://eiris.it/ojs/index.php/ratiomathematica/article/view/1581
3. John Kwadey Okutu, Nana K. Frempong, **Simon K. Appiah**, Atinuke O. Adebanji (2024). Generalization of Odd Ramos-Louzada generated family of distributions: Properties, characterizations, and applications to diabetes and cancer survival datasets. *Heliyon*. https://doi.org/10.1016/j.heliyon.2024.e30690
4. Ernest Konadu Appiah, Eric Nimako Aidoo, Richard Kodzo Avuglah, **Simon Kojo Appiah** (2024). Geographically weighted logistic regression model for identifying risk factors for malaria infection among under-5 children in Ghana. *Scientific African*. https://doi.org/10.1016/j.sciaf.2024.e02398
5. John Kwadey Okutu, Nana K. Frempong, Atinuke O. Adebanji, **Simon K. Appiah** (2024). Modified Ramos-Louzada-G family with baseline Weibull distribution: Properties, characterizations, regression, and applications. *Scientific African*. https://doi.org/10.1016/j.sciaf.2024.e02352
6. John Kwadey Okutu, Nana K. Frempong, **Simon K. Appiah**, Atinuke O. Adebanji (2023). A New Generated Family of Distributions: Statistical Properties and Applications with Real-Life Data. *Computational and Mathematical Methods*. https://doi.org/10.1155/2023/9325679
7. Hudu Mohammed, F. T. Oduro, **S. K. Appiah** (2023). Alternate Approach (Penalty Approach) to Assignment Problem Solving and Comparison to Existing Approaches. *Journal of Advances in Mathematics and Computer Science*. https://doi.org/10.9734/jamcs/2023/v38i81785
8. Donatus Wewura Adongo, Charles Kwaku Benneh, David Adedia, Hilda Amekyeh, Augustine Tandoh, Bernice Kyeremaah, Atinuke Olusola Adebanji, **Simon Kojo Appiah**, Eric Woode (2023). Correlates of perception and attitude towards people living with epilepsy in Adaklu District, Volta Region, Ghana.

Journal of Global Health Science. https://doi.org/10.35500/jghs.2023.5.e16

9. Nana Owusu M. Essel, Eric Nimako Aidoo, **Simon Kojo Appiah** (2023). Geospatial modelling of COVID-19 vaccination coverage inequalities: evidence from 192 countries. *Spatial Information Research*. https://doi.org/10.1007/s41324-023-00531-3
10. John Kwadey Okutu, Nana K. Frempong, **Simon K. Appiah**, Atinuke O. Adebanji (2023). The Odd Ramos-Louzada Generator of distributions with applications to failure and waiting times. *Scientific African*. https://doi.org/10.1016/j.sciaf.2023.e01912
11. Dawuda Rasheed, **S. K. Appiah** (2023). Vector Autoregressive Model of Maize Production in Northern Region of Ghana. *Asian Journal of Agricultural Extension Economics & Sociology*. https://doi.org/10.9734/ajaees/2023/v41i112287
12. **Simon Kojo Appiah**, Kingsley Wirekoh, Eric Nimako Aidoo, Samuel Dua Oduro, Yarhands Dissou Arthur (2022). A model-based clustering of expectation–maximization and K -means algorithms in crime hotspot analysis. *Research in Mathematics*. https://doi.org/10.1080/27684830.2022.2073662
13. Yarhands Dissou Arthur, **Simon Kojo Appiah**, Kwadwo Amo-Asante, Bright Asare (2022). Modeling student's interest in mathematics: Role of history of mathematics, peer-assisted learning, and student's perception. *Eurasia Journal of Mathematics Science and Technology Education*. https://doi.org/10.29333/ejmste/12458
14. Basintale D. Iddrisu, Kwadzokpui Precious Kwablah, Emmanuel Barima Agyemang Prempeh, Johnson S. Azorlibu, Solomon D. Akrong, Cynthia Sena Kpeglo, David Adedia, Atinuke O. Adebanji, **Simon Kojo Appiah** (2022). Statistical Analysis of Misfiling Causes in Higher Education: A Test Construction. *Asian Journal of Education and Social Studies*. https://doi.org/10.9734/ajess/2022/v33i330793
15. David Adedia, Atinuke O. Adebanji, **Simon K. Appiah** (2021). Calculating non-centrality parameter for power analysis under structural equation modelling: An alternative. *Pakistan Journal of Statistics and Operation Research*. https://doi.org/10.18187/pjsor.v17i1.3148
16. Sampson Twumasi-Ankrah, **Simon Kojo Appiah**, Doris Arthur, Wilhemina Adoma Pels, Jonathan Kwaku Afriyie, Danielson Nartey (2021). Comparison of outlier detection techniques in non-stationary time series data. *Global Journal of Pure and Applied Sciences*. https://doi.org/10.4314/gjpas.v27i1.7
17. Nembot Fogang Brice Armel, Michael Owusu, **Simon Kojo Appiah**, Wilhemina Adoma Pels, Doris Arthur (2021). Forecasting COVID-19 Confirmed Cases in Ghana: A Model Selection Approach. *Path of Science*. https://doi.org/10.22178/pos.67-2
18. Eric N. Aidoo, **Simon K. Appiah**, Gaston E. Awashie, Alexander Boateng, Godfred Darko (2021). Geographically weighted principal component analysis for characterising the spatial heterogeneity and connectivity of soil heavy metals in Kumasi, Ghana. *Heliyon*. https://doi.org/10.1016/j.heliyon.2021.e08039
19. Eric N. Aidoo, Richard T. Ampofo, Gaston E. Awashie, **Simon K. Appiah**, Atinuke O. Adebanji (2021). Modelling COVID-19 incidence in the African sub-region using smooth transition autoregressive model. *Modeling Earth Systems and Environment*. https://doi.org/10.1007/s40808-021-01136-1
20. **Simon Kojo Appiah**, Joseph Xavier Francisco Ribeiro, Kwabena Asiedu Bugyei, Francis Kumi, Joseph Oppong Akowuah, Hayford Ofori, Catherine Otchere (2021). Status, challenges and prospects of food processing equipment fabricators in Ghana. *Scientific African*. https://doi.org/10.1016/j.sciaf.2021.e00843
21. Eric N. Aidoo, Atinuke O. Adebanji, Gaston E. Awashie, **Simon K. Appiah** (2021). The effects of weather on the spread of COVID-19: evidence from Ghana. *Bulletin of the National Research Centre/Bulletin of the National Research Center*. https://doi.org/10.1186/s42269-021-00484-3
22. David Adedia, Livingstone Asem, **Simon Kojo Appiah**, Salifu Nanga, Yeboah Boateng, Kwabena O. Duedu, Lotsi Anani (2020). Assessment of Hypertension-Induced Deaths in Ghana: A Nation-Wide Study from 2012 to 2016. *Journal of Data Analysis and Information Processing*. https://doi.org/10.4236/jdaip.2020.83009
23. Eric Nimako Aidoo, **Simon K. Appiah**, Alexander Boateng (2020). Brief Research Report: A Monte Carlo

Simulation Study of Small Sample Bias in Ordered Logit Model under Multicollinearity. *The Journal of Experimental Education*. https://doi.org/10.1080/00220973.2019.1708233

24. David Adedia, Atinuke O. Adebanji, **Simon Kojo Appiah** (2020). Comparative Analysis of Some Structural Equation Model Estimation Methods with Application to Coronary Heart Disease Risk. *Journal of Probability and Statistics*. https://doi.org/10.1155/2020/4181426
25. Eric N. Aidoo, Williams Ackaah, **Simon K. Appiah**, Ernest K. Appiah, Joseph Addae, Haruna Alhassan (2019). A bivariate probit analysis of child passenger's sitting behaviour and restraint use in motor vehicle. *Accident Analysis & Prevention*. https://doi.org/10.1016/j.aap.2019.05.022
26. David Adedia, Salifu Nanga, **Simon Kojo Appiah**, Anani Lotsi, Daniel A. Abaye (2018). Box-Jenkins' Methodology in Predicting Maternal Mortality Records from a Public Health Facility in Ghana. *Open Journal of Applied Sciences*. https://doi.org/10.4236/ojapps.2018.86016
27. **DAOMWN S.K. Appiah** (2018). Geostatistical analysis of contamination of soils in an urban area in Ghana. *International Journal of Mathematical and Computational Sciences*.
28. Alex Kwaku Peprah, **Simon Kojo Appiah**, Samuel Kwame Amponsah (2017). An Optimal Cooling Schedule Using a Simulated Annealing Based Approach. *Applied Mathematics*. https://doi.org/10.4236/am.2017.88090
29. Yarhands Dissou Arthur, Samuel Asiedu-Addo, **Simon Kojo Appiah** (2017). Gender Stereotype and Motivation in Learning Statistics among Tertiary Students in Ghana. *International Electronic Journal of Mathematics Education*. https://doi.org/10.29333/iejme/636
30. **Simon Kojo Appiah**, Derrick Asamoah Owusu, Edem B. Ahiale (2016). A Survival Analysis Approach to Estimating Funding Liquidity Risk in Banks. *International journal of statistics and applications*.
31. DA Owusu, **SK Appiah**, AY Omari-Sasu (2016). Pension fund asset allocation under the Markowitz model: A case of the national pension scheme in Ghana. *Applied Mathematics*. https://www.academia.edu/download/63422785/Pension_Fund_Asset_Allocation_under_the_Markowitz_Model20200525-96174-1e9zhp3.pdf
32. DA Owusu, **SK Appiah**, AY Omari-Sasu (2016). Pricing and profit testing of" keyman" life policy of insurance companies in Ghana. *International Journal of Finance and Accounting*. https://www.academia.edu/download/99718945/showpaperpdf.pdf
33. Samuel Kwame Amponsah, **Simon Kojo Appiah**, Alex Kwaku Peprah, Felix Siaw Yeboah (2016). Simulated Annealing Approach to Solution of Integrated Circuit Problems. *Journal of Asian Scientific Research*. https://doi.org/10.18488/journal.2/2016.6.8/2.8.128.137
34. Richard Amoh-Gyimah, Eric N. Aidoo, Millicent A. Akaateba, **Simon K. Appiah** (2016). The effect of natural and built environmental characteristics on pedestrian-vehicle crash severity in Ghana. *International Journal of Injury Control and Safety Promotion*. https://doi.org/10.1080/17457300.2016.1232274
35. Yarhands Dissou Arthur, Kwasi Baah Gyamfi, **Simon Kojo Appiah** (2013). Probability Distributional Analysis of Hourly Solar Irradiation in Kumasi-Ghana. *RePEc: Research Papers in Economics*. https://doi.org/10.18533/ijbsr.v3i3.57