Kwame Oteng Gyasi

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RESEARCH

Interests	Telecommunication Systems · Antenna Theory and Design
Areas	Electrical and Electronic Engineering · Aerospace Engineering · Computer Networks and Communications · Business and International Management · Ecology, Evolution, Behavior and Systematics · Management Science and Operations Research

RESEARCH SUMMARY

29	306	8	7	1.17	27%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 29 publications listed below, 2009–2026. Field-weighted impact is the mean over the 15 works scored for it; 1.00 is the world average for works of the same field, type and year. 4 of the 15 papers scored for it are among the world's most cited tenth for their field, type and year.

POSITIONS

Lecturer 2020–present
Telecommunication Engineering, Kwame Nkrumah University of Science and Technology College of Engineering, Kumasi, Ghana

EDUCATION AND QUALIFICATIONS

PhD 2014–2018
Center for RFIC and System Technology ,School of Communication and Information Engineering, University of Electronics Science and Technology of China, Chengdu, China

PUBLICATIONS

Journal articles 26

1. **KO Gyasi** (2026). AI-DRIVEN SPECTRUM SENSING IN COGNITIVE RADIO NETWORKS. *ARPN Journal of Engineering and Applied Sciences*.
2. Kusi Ankrah Bonsu, Ebenezer Baidoo BAIDOO Bediako, Kwaku Fokuoh Darkwah, John Amoah-Mensah, **Kwame Oteng Gyasi** (2026). Energy-Efficient Power Allocation for Cell-Free Massive MIMO Systems. *Applied Mathematics and Statistics*. https://doi.org/10.53941/ams.2026.100011
3. Mubarak S. Ellis, David Amoako, Elijah Atiigah, Derrick Dompreh, Christian Agyekum, George A. Prah, **Kwame O. Gyasi**, Kingsford S.O. Kwakye, Abdul R. Ahmed, Jerry J. Kponyo (2025). A Miniaturized Shorted Radiator-Ground Monopole Antenna with High Gain End-Fire Radiation Pattern. *IEICE Communications Express*. https://doi.org/10.23919/comex.2025xbl0074
4. Emmanuel Ampoma Affum, Edward Danso Ansong, **Kwame Oteng Gyasi**, Maxwell Afriyie Oppong, Isaac Kweku Boakye, Francois Sekyere Sekyere, Louis Owusu Annan (2025). A Stochastic Geometry Analysis on The Uplink Performance of Cell-Free Massive MIMO Systems with Hardware Impairments. *Journal of Electronics and Electrical Engineering*. https://doi.org/10.37256/jeee.4220257189
5. Simon Atuah Asakipaam, Jerry John Kponyo, **Kwame Oteng Gyasi**, Justice Owusu Agyemang, Kingsford

Sarkodie Obeng Kwakye, Kwame Opuni-Boachie Obour Agyekum (2025). Adaptive Resource Management Framework for Profit Optimisation in 5G Network Slicing. *IET Networks*. https://doi.org/10.1049/ntw2.70018

6. R. Gyaang, A. Abdul-Rahman, E. S. Mubarak, K. S. O. Kwakye, **K. O. Gyasi**, D. N. A. Gookyi (2025). Analysis and Design of a Six-Port Network Based on a Modified Schiffman Phase Shifter. *African Journal Of Applied Research*. https://doi.org/10.26437/ajar.v11i1.872

7. Kwaku Kwarteng, **Kwame O. Gyasi**, Justice O. Agyemang, Kwame Agyekum, Kingsford Kwakye, Ellis M. Sani, Emmanuel A. Ampomah, Kusi A. Bonsu (2025). Cat Swarm Optimization with Lévy Flight for Link Load Balancing in SDN. *Journal of Telecommunications and Information Technology*. https://doi.org/10.26636/jtit.2025.1.1773

8. Mubarak S. Ellis, Christian Agyekum, George A. Prah II, Derrick Dompreh, Elijah Atiigah, David Amoako, **Kwame O. Gyasi**, Kingsford S.O. Kwakye, Abdul R. Ahmed, Jerry J. Kponyo (2025). End-fire radiation characteristics and high gain performance of a miniaturized printed monopole antenna based on theory of characteristic modes. *IEICE Electronics Express*. https://doi.org/10.1587/elex.22.20250355

9. Daniel Kuyoli Ngala, Kwasi Adu-Boahen Opare, Emmanuel Ampoma Affum, **Kwame Oteng Gyasi**, Kwame Opuni-Boachie Obour Agyekum (2023). A greedy algorithm for pilot contamination mitigation using LAP. *Journal of Engineering and Applied Science*. https://doi.org/10.1186/s44147-023-00239-z

10. JJ Kponyo, KAB Opare, **KO Gyasi** (2023). An Optimized Vertical Handover Decision Model for the Heterogeneous DSRC/LTE Vehicular Networks. *J. Commun.*. https://www.jocm.us/2023/JCM-V18N8-489.pdf

11. **Kwame Oteng Gyasi**, Abdelheq Boukarkar, Kingsford Sarkodie Obeng Kwakye, Mubarak Sani Ellis, Abdul-Rahman Ahmed, Jerry John Kponyo, Muhammad Abdul Basit, Nosherwan Shoaib (2023). Characteristic mode analysis of a compact circularly polarized rotated square slot antenna. *Microwave and Optical Technology Letters*. https://doi.org/10.1002/mop.33616

12. Kingsford Sarkodie Obeng Kwakye, Nouman Rasool, **Kwame Oteng Gyasi**, Joseph Abroquah, Mubarak Sani Ellis, Ohemeng Lord Owusu, Abdul-Rahman Ahmed, Jerry John Kponyo (2023). Design and Analysis of a Low-Profile Dual-Band Circularly Polarized Monopole Antenna Based on Characteristic Mode Analysis. *International Journal of RF and Microwave Computer-Aided Engineering*. https://doi.org/10.1155/2023/7855907

13. JJ Kponyo, KAB Opare, **KO Gyasi** (2023). Heterogeneous Architecture for DSRC/LTE Vehicular Communication Networks Based on the ITS Reference Architecture with Fuzzy Logic for Decision-Making. *J. Commun.*. https://www.jocm.us/2023/JCM-V18N5-318.pdf

14. Simon Atuah Asakipaam, Jerry John Kponyo, **Kwame Oteng Gyasi** (2023). Resource Provisioning and Utilization in 5G Network Slicing: A Survey of Recent Advances, Challenges, and Open Issues. *International Journal of Computer Networks And Applications*. https://doi.org/10.22247/ijcna/2023/220736

15. M.S. Ellis, A.-R. Ahmed, J.J. Kponyo, **K.O. Gyasi**, K.S.O. Kwakye, S. Ameyaw (2022). Improved bandwidth and F/B ratio of a CPW-fed planar monopole antenna. *Heliyon*. https://doi.org/10.1016/j.heliyon.2022.e10037

16. Emmanuel Ampoma Affum, **KO Gyasi** (2019). Massive MIMO with Transceiver Hardware Impairments: Performance Analysis and Phase Noise Error Minimization. *KSII Transaction on Internet and Information Systems*. https://www.academia.edu/download/88145865/TIISVol13No5-7.pdf

17. **KO Gyasi** (2018). A Compact Broadband Circularly Polarized Slot Antenna with Two Linked Rectangular Slots and an Inverted-F Feed Line. *IEEE Transactions on Antennas and Propagation*. https://ieeexplore.ieee.org/abstract/document/8445652/

18. **KO Gyasi** (2018). A Compact Broadband Cross-Shaped Circularly Polarized Planar Monopole Antenna with a Ground Plane Extension. *IEEE Antennas and Wireless Propagation Letters,*. https://ieeexplore.ieee.org/abstract/document/8246568/

19. Affum Emmanuel Ampoma, Guangjun Wen, Yongjun Huang, **Kwame Oteng Gyasi**, Parfait I. Tebe, Kwadwo Ntiamoah-Sarpong (2018). Spatial Correlation Models of Large-Scale Antenna Topologies Using Maximum Power of Offset Distribution and its Application. *IEEE Access*. https://doi.org/10.1109/access.

2018.2846260

20. **KO Gyasi** (2018). Tri-band Planar Monopole Antenna with Two Circularly Polarized Bandwidths for WiMAX Applications. *IET Microwave, Antennas and Propagation*. https://doi.org/10.1049/iet-map.2018.5323
21. **OG Kwame** (2017). Broadband circularly polarized cross shaped slot antenna with improved feedline. *Progress in Electromagnetics Research C (PIER C)*. https://www.jpier.org/PIERC/pier.php?paper=17020501
22. **K Oteng Gyasi** (2017). Broadband circularly polarized square slot antenna with a G-shaped feedline. *Microwave and Optical Technology Letters*. https://doi.org/10.1002/mop.30869
23. Emmanuel Ampoma Affum, **OG Kwame** (2017). Three-Dimensional Spatial Fading Correlation of Uniform Rectangular Array Using Total Power of Angular Distribution. *IEEE Antennas and Wireless Propagation Letters*. https://ieeexplore.ieee.org/abstract/document/7915683/
24. Emmanuel Ampoma Affum, **OG Kwame** (2016). Evaluation of SmallReceiving Monopole Array with Decoupling Networksin Massive MIMO System. *Proceedings of the World Congress on Engineering*. http://www.iaeng.org/publication/WCE2016/WCE2016_pp577-582.pdf
25. J. B. NAAB, S. S. SEINI, **K. O. GYASI**, G. Y. MAHAMA, P. V. V. PRASAD, K. J. BOOTE, J. W. JONES (2009). GROUNDNUT YIELD RESPONSE AND ECONOMIC BENEFITS OF FUNGICIDE AND PHOSPHORUS APPLICATION IN FARMER-MANAGED TRIALS IN NORTHERN GHANA. *Experimental Agriculture*. https://doi.org/10.1017/s0014479709990081
26. VA Clottey, N Karbo, **KO Gyasi** (2009). The tomato industry in northern Ghana: Production constraints and strategies to improve competitiveness. *African Journal of Food Agriculture Nutrition and Development*. https://doi.org/10.4314/ajfand.v9i6.46265

Conference papers 3

1. **OG Kwame** (2016). Bandwidth enhancement of a microstrip-line-fed printed rotated wide slot antenna with tuning stubs. *2016 IEEE MTT-S International Wireless Symposium (IWS)*. https://ieeexplore.ieee.org/abstract/document/7585437/
2. **OG Kwame** (2014). A compact wideband CPW-fed hybrid slot antenna. *Proceedings of 2014 3rd Asia-Pacific Conference on Antennas and Propagation*. https://ieeexplore.ieee.org/abstract/document/6992410/
3. **OG Kwame**, MS Ellis (2013). A wideband single fed circularly polarized slot antenna for multi-band applications. *2013 2nd International Symposium on Instrumentation and Measurement, Sensor Network and Automation (IMSNA)*. https://ieeexplore.ieee.org/abstract/document/6743353/