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RESEARCH

Interests	Antennas · Computational Electromagnetics · Fiber Optic Transmission
Areas	Electrical and Electronic Engineering · Aerospace Engineering · Computer Networks and Communications · Biomedical Engineering · Biophysics · Electronic, Optical and Magnetic Materials

RESEARCH SUMMARY

18	82	6	1	1.33	25%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 18 publications listed below, 2014–2026. Field-weighted impact is the mean over the 12 works scored for it; 1.00 is the world average for works of the same field, type and year. 3 of the 12 papers scored for it are among the world's most cited tenth for their field, type and year.

PUBLICATIONS

Journal articles 13

1. Eric Amoateng, Ellis Mubarak Sani, **Kingsford Sarkodie Obeng Kwakye**, Alexandros Pitilakis (2026). Analysis and Design of a Hybrid Graphene/Vanadium-Dioxide Terahertz Metasurface with Independently Reconfigurable Reflection Phase and Magnitude. *Photonics*. https://doi.org/10.3390/photonics13020195
2. 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
3. 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
4. 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
5. 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
6. 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
7. Antwi Owusu Agyeman, Affum Emmanuel Ampoma, Tweneboah-Koduah Samuel, Kwasi Adu-Boahen Opare, **Kingsford Sarkodie Obeng Kwakye**, Willie Ofosu (2025). IRS-Assisted Communication in 3D Stochastic Geometry Utilizing Large Antenna Transmitters With Hardware Impairments. *IET*

Communications. https://doi.org/10.1049/cmu2.70079

8. Akua Achiaa, James Dzisi Gadze, **Kingsford Sarkodie Obeng Kwakye**, Kwame Agyeman Prempeh Agyekum, Justice Owusu Agyemang (2024). Measurement and evaluation of electromagnetic radiation exposure from antennas in cellular networks in Ghana. *International Journal of Wireless and Mobile Computing*. https://doi.org/10.1504/ijwmc.2024.141457
9. 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
10. **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
11. Samuel Tweneboah-Koduah, Emmanuel Ampoma Affum, **Kingsford Sarkodie Obeng Kwakye**, Owusu Agyeman Antwi (2022). Decode and Forward Coding Scheme for Cooperative Relay NOMA System with Cylindrical Array Transmitter. *International Journal of Advanced Computer Science and Applications*. https://doi.org/10.14569/ijacsa.2022.0131090
12. 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
13. **Kingsford Sarkodie Obeng Kwakye** (2014). 2x2 Rectangular-Slot Microstrip Array Antenna for WLAN Applications. *Applied Mechanics and Materials*. https://www.scientific.net/AMM.619.162

Conference papers 5

1. **Kingsford Sarkodie Obeng Kwakye** (2017). A square slot circularly polarized microstrip antenna with enhanced bandwidth. *2017 International Applied Computational Electromagnetics Society Symposium-Italy (ACES)*. https://ieeexplore.ieee.org/abstract/document/8026882/
2. **Kingsford Sarkodie Obeng Kwakye** (2017). Compact 4-port MIMO antenna system for 5G mobile terminal. *2017 International Applied Computational Electromagnetics Society Symposium-Italy (ACES)*. https://ieeexplore.ieee.org/abstract/document/7916045/
3. **Kingsford Sarkodie Obeng Kwakye** (2016). A simple circularly-polarized traveling-wave array antenna. *2016 IEEE/ACES International Conference on Wireless Information Technology and Systems (ICWITS) and Applied Computational Electromagnetics (ACES)*. https://ieeexplore.ieee.org/abstract/document/7465313/
4. **Kingsford Sarkodie Obeng Kwakye** (2014). A dual-feed circularly-polarized traveling-wave array antenna. *2014 Asia-Pacific Microwave Conference*. https://ieeexplore.ieee.org/abstract/document/7067736/
5. **Kingsford Sarkodie Obeng Kwakye** (2014). Suspended stripline UWB bandpass filter with adjustable transmission zero. *2014 Asia-Pacific Microwave Conference*. https://ieeexplore.ieee.org/abstract/document/7067881/