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RESEARCH

Interests	Design and Manufacturing with Applied Mechanics
Areas	Mechanical Engineering · Electrical and Electronic Engineering · Biomedical Engineering · Automotive Engineering · Civil and Structural Engineering · Materials Chemistry

RESEARCH SUMMARY

58	178	6	2	0.54	5%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 58 publications listed below, 2001–2026. Field-weighted impact is the mean over the 38 works scored for it; 1.00 is the world average for works of the same field, type and year. 2 of the 38 papers scored for it are among the world's most cited tenth for their field, type and year.

PUBLICATIONS

Journal articles 50

1. Michael Kwabena Boadu, Anthony Agyei-Agyemang, **Prince Yaw Andoh**, Faisal Wahib Adam (2026). Assessment of Mechanical Behaviour Trends of Surface-Ground AA7075 Thin Plate Across Run Orders. *Advances in Mechanical and Materials Engineering*. https://doi.org/10.7862/rm.2026.3
2. GK Ayetor, **PY Andoh** (2026). Comparative Performance of New and Remanufactured Lithium-Ion EV Battery Packs in Ghana. *Journal of Engineering Research and Reports*. https://hal.science/hal-05638318/
3. Michael Boadu, Anthony Agyei-Agyemang, **Prince Andoh**, Faisal Adam (2026). Modelling and Optimisation of Resilience and Corrosion Rate of Aluminium 7075 Thin Plate during Surface Grinding. *MUST Journal of Research and Development*.. https://doi.org/10.62277/mjrd2026v7i20001
4. Michael Kwabena Boadu, Anthony Agyei-Agyemang, **Prince Yaw Andoh** (2026). Multi-objective optimization of corrosion current density and polarization resistance of surface-ground AA7075 thin plate in 3.5 wt.% NaCl solution. *Advances in Mechanical and Materials Engineering*. https://doi.org/10.7862/rm.2026.8
5. Michael Kwabena Boadu, Anthony Agyei-Agyemang, **Prince Y. Andoh**, Faisal W. Adam (2026). Multi-response optimization of tensile strength and total elongation of aluminum 7075 plate after surface grinding. *Journal of the Ghana Institution of Engineering (JGhIE)*. https://doi.org/10.56049/jghie.v26i1.301
6. Samuel Opare, Godwin Kafui Ayetor, Rockson Bedu Seth, Felix Kwashiegah, **Prince Yaw Andoh** (2025). Assessing the Profitability of a Remanufactured Electric Vehicle Battery Pack. *Journal of Engineering Research and Reports*. https://doi.org/10.9734/jerr/2025/v27i111715
7. **Prince Yaw Andoh**, Richard Opoku, Felix Uba, Gidphil Mensah, Charles Kofi Kafui Sekere (2025). Comparative Analysis of Power Quality of Solar PV Power Only, Hybrid Solar PV–Grid Power, and National Grid Power Only for SMEs: The Case of a Laundry Shop in Ghana. *Journal of Engineering*. https://doi.org/10.1155/je/8786462
8. Michael Boadu, Anthony Agyei-Agyemang, **Prince Andoh**, Faisal Adam (2025). Effects of Surface Grinding Parameters on the Surface Roughness of Aluminum 7075 Thin Plate. *Journal of Amasya University the Institute of Sciences and Technology*. https://doi.org/10.54559/amesia.1813507

9. Godwin Kafui Ayetor, Anthoinette Ativor, Martin Appiah Kesse, Peter Oppong Tawiah, Boucar Diouf, Samuel Opare, Ephraim Bonah Agyekum, **Prince Yaw Andoh** (2025). Realistic assessment of electric vehicle policies in Africa: a case study of Ghana. *Case Studies on Transport Policy*. https://doi.org/10.1016/j.cstp.2025.101500

10. Michael Boadu, Anthony Agyei-Agyemang, **Prince Andoh**, Faisal Adam (2025). Sequential Trends in Corrosion Behaviour of Surface-Ground Aluminium 7075 Thin Plates in 3.5 wt% NaCl Solution. *MUST Journal of Research and Development.*. https://doi.org/10.62277/mjrd2025v6i30002

11. C.K.K. Sekyere, R. Opoku, B. Asaaga, B. Baah, **P.Y. Andoh**, G.Y. Obeng, J. Agbogla (2025). Techno-environmental assessment of the fuel properties of a variety of briquettes for biomass boiler applications. *Cleaner Energy Systems*. https://doi.org/10.1016/j.cles.2025.100185

12. Emmanuel Obobi Tettehfio, **Prince Y. Andoh**, Charles Atombo, Charles K.K. Sekyere, Godwin K. Ayetor (2024). Assessing the Safety of Auto-Rickshaws Used as Public Transport in Ghana. *Advanced engineering forum*. https://doi.org/10.4028/p-lzqg3w

13. Godwin Kafui Ayetor, Frank Kwabena Nyarko, **Prince Yaw Andoh** (2023). Achieving Cost Parity for Battery Electric Vehicles in Africa: a case study of Ghana. *Transportation Letters*. https://doi.org/10.1080/19427867.2023.2168348

14. Emmanuel Obobi Tettehfio, Agus Setiawan, Iwan Kustiawan, **Prince Yaw Andoh** (2023). Exploring disruptive power: Acceptance of digital technologies in mechanical engineering education among Ghanaian technical university teachers. *Jurnal Pendidikan Vokasi*. https://doi.org/10.21831/jpv.v13i3.63606

15. Francis Davis, **Prince Yaw Andoh**, Yesuenyeagbe A. K Fiagbe, Albert Kweku Atsu (2023). Optimization of gas tungsten arc welding parameters for welding of super duplex stainless steel using factorial design. *Cogent Engineering*. https://doi.org/10.1080/23311916.2023.2216870

16. Joseph Nyumutsu, Anthony Agyei-Agyemang, **Prince Yaw Andoh**, Peter Oppong Tawiah, Benjamin Atribawuni Asaaga (2023). The Potential of Sawdust and Coconut Fiber as Sound Reduction Materials. *Journal of Applied Engineering and Technological Science (JAETS)*. https://doi.org/10.37385/jaets.v4i2.624

17. **Prince Yaw Andoh**, Godwin Kafui Ayetor, Kofi Owura Amoabeng, Michael Nii Sackey Sackey (2022). Assessment of Automobile Engines Rebuilt at Local Artisan Workshops in Ghana. *Journal of Applied Engineering and Technological Science (JAETS)*. https://doi.org/10.37385/jaets.v3i2.314

18. **Prince Yaw Andoh**, Dzebre D.E.K. (2022). CHARACTERISATION OF A FIBRE REINFORCED MATERIAL FOR SMALL WIND TURBINE APPLICATIONS. *Journal of Sustainable Energy*. https://www.researchgate.net/profile/Denis-Dzebre/publication/365726852_CHARACTERISATION_OF_A_FIBRE_REINFORCED_MATERIAL_FOR_SMALL_WIND_TURBINE_APPLICATIONS/links/63803b9b554def61936b91b9/CHARACTERISATION-OF-A-FIBRE-REINFORCED-MATERIAL-FOR-SMALL-WIND-TURBINE-APPLICATIONS.pdf

19. **Prince Yaw Andoh**, L D Mensah, D E K Dzebre, Kofi Owura Amoabeng, Charles Kofi Kafui Sekyere (2022). Investigating The Failure of Leaf Springs in Automobile Suspension on Ghana Road. *Journal of Applied Engineering and Technological Science (JAETS)*. https://doi.org/10.37385/jaets.v4i1.508

20. **Prince Yaw Andoh Andoh**, Kofi Owura Amoabeng, Charles Kofi Kafui Sekyere, D E K Dzebre (2022). Performance Analysis of a Mechanical System To Break and Separate Palm Nut-Fibre Cake. *Journal of Applied Engineering and Technological Science (JAETS)*. https://doi.org/10.37385/jaets.v4i1.509

21. **PY Andoh**, C. K. K. Sekyerea, b, D. E. K. Dzebrea (2022). Performance assessment of a solar powered egg incubator with a backup heater. *Al-Qadisiyah Journal for Engineering Sciences*. https://doi.org/10.30772/qjes.v15i2.821

22. **PY Andoh** (2022). Selection of Optimum Pouring Conditions for Improvement of Aluminum Alloy Castings in Ghana. *Journal of Science and Technology (Ghana)*. https://www.ajol.info/index.php/just/article/view/233428

23. **Prince Yaw Andoh**, Anthony Agyei-Agyemang, Peter Oppong Tawiah, Charles Kofi Kafui Sekyere, Charles McCarthy Asante (2021). Development of Composite Material for Wind Turbine Blades. *Journal of Applied Engineering and Technological Science (JAETS)*. https://doi.org/10.37385/jaets.v2i2.211

24. **Prince Yaw Andoh**, Charles Kofi Kafui Sekyere, Godwin Kafui Ayetor, Michael Nii Sackey (2021). Fabrication and Testing of a Low-Cost Wind Turbine Blade using Bamboo Reinforced Recycled Plastic. *Journal of Applied Engineering and Technological Science (JAETS)*. https://doi.org/10.37385/jaets.v2i2.212
25. **Prince Yaw Andoh Andoh**, Charles Kofi Kafui Sekyere, L. D. Mensah, D. E.K. Dzebre (2021). Forecasting Electricity Demand In Ghana With The Sarima Model. *Journal of Applied Engineering and Technological Science (JAETS)*. https://doi.org/10.37385/jaets.v3i1.288
26. **PY Andoh**, A Agyei-Agyemang, PO Tawiah (2021). OPTIMIZAING THE WEIGHT CLOGGED OF A VIBRATING SCREEN DURING MINING OPERATIONS. *Journal of Science and Technology*. https://journal.knust.edu.gh/index.php/just/article/view/1236
27. G.K. Ayetor, Innocent Mbonigaba, M.N. Sackey, **P.Y. Andoh** (2021). Vehicle regulations in Africa: Impact on used vehicle import and new vehicle sales. *Transportation Research Interdisciplinary Perspectives*. https://doi.org/10.1016/j.trip.2021.100384
28. Emmanuel Akowuah, **Prince Yaw Andoh**, Joshua Ampofo (2019). Development of Biomechanical Model and FEA Modal Analysis of the Gravid Human Uterus Exposed To Ramp-Induced Vibration.
29. Emmanuel Akowuah, Joshua Ampofo, **Prince Yaw Andoh** (2019). Evaluation of Ramp-Induced Vibration Exposure Level for a Pregnant Woman Commuting Along Urban Roads in Ghana.
30. A. T. Larbie, **Prince Yaw Andoh**, Joshua Ampofo (2017). An Evaluation of The Impact of Public-Private Partnership on Vehicle Inspection in The Greater Accra Region of Ghana. *African Journal Of Applied Research*.
31. **PY Andoh**, A Agyei-Agyemang, PO Tawiah (2017). Model for the Prediction and Optimization of Flaws and Material Removal Rate during Machining of Shafts in Ghana. *Journal of Science and Technology (Ghana)*. https://www.researchgate.net/profile/Michael-Kwabena-Boadu-2/publication/361616712_Model_for_the_Prediction_and_Optimization_of_Flaws_and_Material_Removal_Rate_during_Machining_of_Shafts_in_Ghana/links/62bca649f9dee438e8cbcd0a/Model-for-the-Prediction-and-Optimization-of-Flaws-and-Material-Removal-Rate-during-Machining-of-Shafts-in-Ghana.pdf
32. S. R. Braimah, Jamal-Deen Kukurah, **Prince Yaw Andoh** (2017). Optimization of Lemon Grass Oil Extraction Process Using Factorial Design Technique. *African Journal Of Applied Research*.
33. PO Tawiah, **PY Andoh**, A Agyei-Agyemang, F Nyarko (2016). Characterization of Recycled Plastics for Structural Applications. *International Journal of Science and Technology*. https://www.academia.edu/download/55808500/3379145761289.pdf
34. **PY Andoh**, PO Tawiah, A Agyei-Agyemang (2016). Characterization of the Mechanical Properties of Ghanaian Bamboo for Structural Applications. *International Journal of Science and Technology*. https://scholar.google.com/scholar?cluster=2253378860893964090&hl=en&oi=scholarr
35. **PY Andoh**, PO Tawiah (2016). Designing a Mechanical System that will be used to Extract and Separate Lemon Grass Oil. *International Journal of Science and Technology*. https://scholar.google.com/scholar?cluster=12624948065847653589&hl=en&oi=scholarr
36. Emmanuel Akowuah, **Prince Yaw Andoh** (2016). Effect of Speed Ramps on Fire Tender And Service Delivery: A Case Study of The Central Region, Ghana.
37. F Davis, **PY Andoh**, MN Sackey, SP Owusu-Ofori (2015). Assessment of friction between a rolling cylindrical element and a deformable flat surface. *Journal of Science and Technology (Ghana)*. https://doi.org/10.4314/just.v34i2.4
38. Emmanuel Akowuah, Joshua Ampofo, **Prince Yaw Andoh** (2015). Effect of Speed Ramps on Pregnant Women: A Case Study of Travellers Along Kumasi-Cape Coast Highway.
39. A. Agyei-Agyemang, G. Y. Obeng, **P. Y. Andoh** (2014). Experimental Evaluation of the Attenuation Effect of a Passive Damper on a Road Vehicle Bumper. *World Journal of Engineering and Technology*. https://doi.org/10.4236/wjet.2014.23021
40. Timothy Alhassan, **Prince Y. Andoh**, Prince Owusu Ansah, Justice Alex Frimpong (2014). Relationship between Vehicle Manufacturers Recommended Tyre Pressure and Tyre Pressure Used by Vehicle Owners. *Research Journal of Applied Sciences Engineering and Technology*. https://doi.org/10.19026/rjaset.7.558

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42. Seth Daniel Oduro, Timothy Alhassan, Prince Owusu Ansah, **Prince Y. Andoh** (2013). A Mathematical Model for Predicting the Effects of Tyre Pressure on Fuel Consumption. *Research Journal of Applied Sciences Engineering and Technology*. https://doi.org/10.19026/rjaset.6.4046

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49. F Davies, L E Ansong, **P Y Andoh**, S P Owusu-Ofori (2008). Quasi-Automatic Monitoring System For Turning Operation Using Acoustic Emission Signal Response And Factorial Design Method. *Journal of Science and Technology (Ghana)*. https://doi.org/10.4314/just.v27i3.33063

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Conference papers 6

1. Solomon Akumanyin, **Prince Yaw Andoh**, Mariwan Sulemana, Elijah Collins-Hespelt, Benjamin Gyimah, Sarpong Ama Sarpomaa-Yeboah, Ofori Kwasi Dzokoto (2026). Performance Evaluation and Techno-Economic Analysis of an EV Conversion in a Tropical Climate: A Toyota Corona Case Study in Ghana. https://doi.org/10.1109/metroautomotive69354.2026.11644672

2. **PY Andoh** (2009). An Overview of Practical Statistical Methods for Evaluating Quality Characteristics. *7th College of Engineering Research Retreat (CERR 7), Koforidua, Eastern Region, Ghana*.

3. **PY Andoh** (2009). Effects of Turning Variables on Acoustic Emission's Energy Response using Factorial Design Method. *7th College of Engineering Research Retreat (CERR 7), Koforidua, Eastern Region, Ghana*.

4. F Davis, **PY Andoh** (2009). Time Series Models for Dynamic Analysis of Product Quality. *7th College of Engineering Research Retreat (CERR 7), Koforidua, Eastern Region, Ghana*.

5. **PY Andoh** (2003). Acoustic Emission Measurements to determine the Effects of Boundary Conditions on Drilling of Polymeric Composites. *ICCE/10, New Orleans*.

6. **PY Andoh** (2002). A Parameter for Characterization of changes in Structural Integrity of Composite Laminates. *ICCE/9, San Diego*.

Theses 2

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2. **PY Andoh** (2001). Development of a Quantitative Parameter for Non-destructive Evaluation of Laminated Composite Parts. *North Carolina Agricultural and Technical State University*. https://scholar.google.com/scholar?cluster=5209324626801017921&hl=en&oi=scholarr