Daniel Yaw Addai Duah

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RESEARCH

Interests	Sustainable · Inclusive · Smart Built Environments · Sustainable Design · Sustainable Construction · Energy Efficiency · Universal Design · Smart and Universal Design · Barrier free Environments
Areas	Building and Construction · Social Psychology · Management Science and Operations Research · Urban Studies · Pollution · Speech and Hearing

RESEARCH SUMMARY

70	605	14	17	1.27	14%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 70 publications listed below, 2011–2025. Field-weighted impact is the mean over the 37 works scored for it; 1.00 is the world average for works of the same field, type and year. 5 of the 37 papers scored for it are among the world's most cited tenth for their field, type and year.

POSITIONS

Associate Professor 2020–present
Architecture, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

Senior Lecturer 2015–2020
Architecture, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

Lecturer 2006–2015
Architecture, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

Tutor-in-Building Studies 2006
Construction, Barnfield College, Luton, United Kingdom

EDUCATION AND QUALIFICATIONS

PhD Planning, Design and Construction 2010–2014
Construction Management, Michigan State University, East Lansing, United States

MSc Construction Management and Economics 2003–2004
School of Design, University of Greenwich, London, United Kingdom

Post Graduate Diploma in Architecture 2000–2002
Architecture, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

BSc Architecture 1996–2000
Architecture, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

DISTINCTIONS, MEMBERSHIPS AND SERVICE

Associate 2009–present
Ghana Institute of Architects, Accra, Ghana

PUBLICATIONS

Journal articles 48

1. Bismark Kofi Owusu Sarfo, **Daniel Duah**, Collins Boakye, Collins Twum, Ernest Obeng (2025). Corporate Sustainability and Green Technology Cost-Benefit Analysis: Ghanaian's Perspectives. *Magna Scientia Advanced Research and Reviews*. https://doi.org/10.30574/msarr.2025.15.1.0109
2. L. F. Anzagira, **D. Duah**, E. Badu, E. K. Simpeh (2025). Drivers of the implementation of Green Building concepts and technologies in developing countries: The case of Ghana. *Journal of Planning and Land Management*. https://doi.org/10.36005/jplm.v4i1.178
3. Kwabena Fosuhene Mosner-Ansong, **Daniel Yaw Addai Duah**, Samuel Amos-Abanyie, Ayisha Ida Baffoe-Ashun, Ronald Osei Mensah (2025). Force and motivation Nexus: a two-tier integrated framework for sustainable electric energy-related behaviour change in Sub-Sahara African households. *Discover Energy*. https://doi.org/10.1007/s43937-025-00076-6
4. Saija H. Hollmén, Alexander B. Marful, Taru Niskanen, **Daniel Y. A. Duah**, Esmeranda Manful, Meeri Pitkänen, Irene A. Idun (2025). Kumasi trees – project of the hearts. Decolonial strategies for advancing urban greenery in a Sub-Saharan city. *International Planning Studies*. https://doi.org/10.1080/13563475.2025.2461664
5. **Daniel Duah**, Bismark Kofi Owusu Sarfo, Collins Boakye, Dina Duku (2025). PHISH OR LEGIT? QUANTIFYING WEB-BASED THREAT SIGNALS THROUGH PREDICTIVE ANALYTICS AND FEATURE ATTRIBUTION. *International Journal of Professional Business Review*. https://doi.org/10.26668/businessreview/2025.v10i5.5472
6. **D DUAH**, AB MARFUL (2024). BARRIER-FREE EDUCATION FOR ALL: INVESTIGATING STAKEHOLDER PERCEPTIONS AND CHALLENGES IN GHANAIAN UNIVERSITIES. *Ghana Journal of Science*. https://www.researchgate.net/profile/Alexander-Marful/publication/393517145_BARRIER-FREE_EDUCATION_FOR_ALL_INVESTIGATING_STAKEHOLDER_PERCEPTIONS_AND_CHALLENGES_IN_GHANAIAN_UNIVERSITIES/links/686e5a7492697d42903df783/BARRIER-FREE-EDUCATION-FOR-ALL-INVESTIGATING-STAKEHOLDER-PERCEPTIONS-AND-CHALLENGES-IN-GHANAIAN-UNIVERSITIES.pdf
7. Lukman Kura Abraham Safo, **Daniel Yaw Addai Duah**, Stephen Biliyitorb Liwur, Alexander Boakye Marful (2024). Civic administrative centres in the northern and southern cities of Ghana: Assessing their state and locational distribution and the implications for urban growth and land demand. *Land Use Policy*. https://doi.org/10.1016/j.landusepol.2024.107199
8. Titus Ebenezer Kwofie, Michael Nii Addy, **Daniel Yaw Addai Duah**, Clinton Ohis Aigbavboa, Emmanuel Banahene Owusu, George Felix Olympio (2024). Decision support factors evaluative model for affordable PPP public housing delivery in Ghana. *Journal of Engineering Design and Technology*. https://doi.org/10.1108/jedt-05-2023-0198
9. K.F. Mosner-Ansong, **D. Duah**, S. Amos-Abanyie, A.I. Baffoe-Ashun (2024). Energy efficiency awareness and assertiveness in Sub-Saharan Africa households: The case of Ghana. *Energy Sustainable Development/ Energy for sustainable development*. https://doi.org/10.1016/j.esd.2024.101415
10. I. T. A. O Frimpong, **D. Y. A Duah**, A. B Marful, I. E Kwofie, J. K Offei-Nketiah (2024). Faded memories: The role of design in enhancing the quality of life of persons living with dementia. *Cogent Gerontology*. https://doi.org/10.1080/28324897.2024.2308838
11. Eric Kwame Simpeh, Matilda Akoto, Henry Mensah, Divine Kwaku Ahadzie, **Daniel Yaw Addai Duah**, Nonic Akwasi Reney (2024). Field diagnosis of the criteria for selecting affordable housing in less developed countries: evidence from homeowners and renters in Ghana. *Urbanization, sustainability and society.*. https://doi.org/10.1108/uss-10-2023-0007
12. **D DUAH**, AB MARFUL (2024). REDEFINING INCLUSION, ACCESSIBILITY AND PERCEPTION OF PERSONS WITH DISABILITY THROUGH THE LENS OF ARCHITECTURAL EDUCATION IN GHANA. *Ghana Journal of Science*. https://www.researchgate.net/profile/Alexander-Marful/publication/39351706

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13. **D Duah**, E Badu, AB Marful (2024). Stimulation strategies to promote green building uptake in developing countries: the case of Ghana. *Journal of Engineering*.
14. Lee Felix Anzagira, **Daniel Yaw Addai Duah**, Edward Badu, Eric Kwame Simpeh, Alexander B. Marful, Samuel Amos-Abanyie (2024). Structural equation modelling of the critical barriers influencing the adoption of green building concepts and technologies in Ghana. *Journal of responsible production and consumption.*. https://doi.org/10.1108/jrpc-11-2023-0019
15. M Addy, **DYA Duah**, M Adesi (2024). Towards a circular economy: a knowledge-attitude gap between demand and supply-side operators on green building construction in Ghana. *Smart and Sustainable Built Environment*.
16. Adwoa Difie Ampadu-Asiamah, Samuel Amos-Abanyie, **Daniel Yaw Addai Duah**, Edward Ayebeng Botchway, Kwabena Abrokwa Gyimah (2023). Assessment Framework for IEQ of Classrooms in Basic Schools in Ghana-Review of Data Collection Methods. *Journal of Science and Technology (Ghana)*. https://doi.org/10.4314/just.v41i3.8
17. Ernest Kissi, Prosper Babon-Ayeng, Clinton Aigbavboa, **Daniel Duah**, Eugene Danquah-Smith, Reuben Agyei Tannor (2023). Examining green road construction components: the case of Ghana. *Built Environment Project and Asset Management*. https://doi.org/10.1108/bepam-08-2022-0120
18. Alexander Boakye Marful, Emmanuel Adzah, Francis K.N. Nunoo, **Daniel Yaw Addai Duah**, Eric Anane-Antwi (2023). Exploring street graphics: Strategies and challenges for city branding in Kumasi, Ghana. *Cogent Arts and Humanities*. https://doi.org/10.1080/23311983.2023.2206235
19. David Mbabil Dok-Yen, **Daniel Yaw Addai Duah**, Michael Nii Addy (2023). Frugal Innovation a Game Changer to Sustainable Affordable Housing. *International Review for Spatial Planning and Sustainable Development*. https://doi.org/10.14246/irspsd.11.2_199
20. Alexander Boakye Marful, Oliver Kornyo, Michael Asante, Richard Opoku, **Daniel Yaw Addai Duah**, Benjamin Tei-Partey (2023). Integration of Advanced Metering Infrastructure for Mini-Grid Solar PV Systems in Off-Grid Rural Communities (SoAMIRural). *Sustainability*. https://doi.org/10.3390/su15097526
21. Titus Ebenezer Kwofie, **Daniel Yaw Addai Duah**, Michael Nii Addy, Samuel Amos-Abanyie, Selorm Abla Afeke, Clinton Ohis Aigbavboa, Samuel Owusu Afram (2023). Sustainability literacy level among real estate developers towards sustainability performance optimization in housing delivery in Ghana. *Environment Development and Sustainability*. https://doi.org/10.1007/s10668-023-03604-3
22. Lukman Kura Abraham Safo, **Daniel Yaw Addai Duah**, Stephen Biliyitorb Liwur (2023). Sustainable architectural design and land-use application to civic centres in Ghana: the case of Damongo. *Urban Planning and Transport Research*. https://doi.org/10.1080/21650020.2023.2290055
23. Lee Felix Anzagira, **Daniel Duah**, Edward Badu, Eric Kwame Simpeh, Samuel Amos-Abanyie, Alexander Marful (2022). Application of green building concepts and technologies for sustainable building development in Sub-Saharan Africa: the case of Ghana. *Open House International*. https://doi.org/10.1108/ohi-02-2022-0054
24. Alexander Boakye Marful, Joseph Agyei Danquah, Marina Ansah, Paula Ben-Smith, **Daniel Duah** (2022). DESIGN THINKING AS AN EFFECTIVE TOOL FOR ARCHITECTURAL PEDAGOGY: Challenges and benefits for Ghanaian schools. *Cogent Arts and Humanities*. https://doi.org/10.1080/23311983.2022.2051828
25. Lee Felix Anzagira, **Daniel Duah**, Edward Badu, Eric Kwame Simpeh, Alexander B. Marful (2022). Stimulation strategies to promote green building uptake in developing countries: the case of Ghana. *Journal of Engineering Design and Technology*. https://doi.org/10.1108/jedt-12-2021-0719
26. Florence Dadzoe, Michael Addy, **Daniel Yaw Addai Duah**, Michael Adesi (2022). Towards a circular

economy: a knowledge-attitude gap between demand and supply-side operators on green building construction in Ghana. *Smart and Sustainable Built Environment*. https://doi.org/10.1108/sasbe-03-2022-0048

27. Kofi Agyekum, E Adinyira, **D Duah** (2021). A framework for the implementation of green certification of buildings in Ghana. *International Journal of Construction Management*.
28. **DY Duah**, E Badu (2021). Awareness and application of green building concepts by construction industry stakeholders of sub-saharan african countries. *Journal of Sustainable Development Studies*. https://infinitypress.info/index.php/jsds/article/view/2046
29. L.F. Anzagira, **D. Duah**, E. Badu (2019). A conceptual framework for the uptake of the green building concept in Ghana. *Scientific African*. https://doi.org/10.1016/j.sciaf.2019.e00191
30. Godslove Ampratwum, Kofi Agyekum, Emmanuel Adinyira, **Daniel Duah** (2019). A framework for the implementation of green certification of buildings in Ghana. *International Journal of Construction Management*. https://doi.org/10.1080/15623599.2019.1613207
31. Kofi Agyekum, Emmanuel Adinyira, Bernard Baiden, Godslove Ampratwum, **Daniel Duah** (2019). Barriers to the adoption of green certification of buildings. *Journal of Engineering Design and Technology*. https://doi.org/10.1108/jedt-01-2019-0028
32. **D Duah** (2019). Conceptions of sustainability amongst postgraduate (MSc) construction management students. *Proceedings of 10th West Africa Built Environment Research (WABER) Conference*. https://waberconference.com/wp-content/themes/waberconference/assets/images/docs/Conceptions-of-sustainability-amongst-post-graduate-MSC-construction-management-students.pdf
33. AB Marful, **D Duah** (2019). Exploring barrier-free as a catalyst to smart cities initiatives in Sub Saharan Africa. *IS THIS THE REAL WORLD? Perfect Smart Cities vs. Real Emotional Cities. Proceedings of REAL CORP 2019, 24th International Conference on Urban Development, Regional Planning and Information Society*. https://repository.corp.at/491/
34. Lee Felix Anzagira, E. Badu, **D. Duah** (2019). Towards an Uptake Framework for the Green Building Concept in Ghana: A Theoretical Review. *Resourceedings*. https://doi.org/10.21625/resourceedings.v2i1.452
35. **D Duah** (2018). Occupants' Perceptions on Indoor Comfort as a Key Factor in Residential Energy Use. *Journal of Energy and Natural Resource Management*. http://jenrm.uenr.edu.gh/index.php/uenrjournal/article/view/136
36. **D Duah** (2018). Potentials of an obligatory energy audit of households: towards an energy resilient Ghanaian residential sector. *International Conference on Applied Science and Technology Conference Proceedings*. https://scholar.google.com/scholar?cluster=14464605563065995919&hl=en&oi=scholarr
37. **D Duah** (2018). The Seasonal Effects of Weather on Residential Electric-Energy Usage. *Journal of Energy and Natural Resource Management*. http://jenrm.uenr.edu.gh/index.php/uenrjournal/article/view/123
38. **Daniel Duah**, M. G. Matt Syal (2017). Direct and Indirect Costs of Change Orders. *Practice Periodical on Structural Design and Construction*. https://doi.org/10.1061/(asce)sc.1943-5576.0000342
39. Joseph Agyei Danquah, **Daniel Duah**, Alexander Boakye Marful (2017). SUSTAINABLE PRACTICES IN REAL ESTATE HOUSING IN GHANA: PERCEPTION OF OCCUPANTS. *Journal on Innovation and Sustainability RISUS*. https://doi.org/10.24212/2179-3565.2017v8i4p98-113
40. **D Duah** (2016). Intelligent decision support system for home energy retrofit adoption. *International Journal of Sustainable built environment*. https://www.sciencedirect.com/science/article/pii/S2212609015300558
41. **D Duah** (2015). Role of expert knowledge in home energy retrofits. *Architecture, Engineering and Construction*. https://scholar.google.com/scholar?cluster=14585579110052035268&hl=en&oi=scholarr
42. **D Yaw Addai Duah** (2014). Expert knowledge elicitation for decision-making in home energy retrofits. *Structural Survey*. https://www.emerald.com/ijbpa/article/32/5/377/354529
43. **D Duah** (2014). Information framework for intelligent decision support system for home energy retrofits. *Journal of construction engineering and management*. https://doi.org/10.1061/(asce)co.

1943-7862.0000773

44. **D Duah** (2013). Information framework development for retrofit technology measures. *National Renewable Energy laboratory, United States Department of Energy, Washington, DC, USA*. https://scholar.google.com/scholar?cluster=14988753259596146 11&hl=en&oi=scholarr

45. **D Duah** (2013). Key Factors in Constructability Success: Perception of Construction Professionals in Developing Countries. *The Professional Constructor*.

46. **D Duah** (2012). Health Performance Criteria Framework for Homes. *The Professional Constructor*.

47. Michael Poku-Boansi, **DYA Duah** (2012). Improving Ramp Design as a Barrier-Free Access in Public Buildings in the Kumasi Metropolitan Area, Ghana. *Journal of Sustainable Development in Africa*. https://scholar.google.com/scholar?cluster=18292387049449447823&hl=en&oi=scholarr

48. **DYA Duah** (2011). The Urban Poor and the Excesses of Rents: Evidence from Kumasi, Ghana. *Journal of Science Engineering and Technology*.

Book chapters 1

1. TE Kwofie, **DYA Duah**, MN Addy, S Amos-Abanyie (2023). Collaborative Flow of Work in the Construction Industry. *Emerging Debates in the Construction Industry*. https://doi.org/10.1201/9781003340348-4

Conference papers 13

1. Titus Ebenezer Kwofie, Samuel Amos-Abanyie, Florence Yaa Akyaa Ellis, **Daniel Yaw Addai Duah**, Clinton Ohis Aigbavboa, Michael Nii Addy, Wellington Didibhuku Thwala (2024). An Analysis of Influence of Information-Sharing Behavioural Factors on Information Asymmetry in PPP Projects. https://doi.org/10.1007/978-3-031-69606-0_42

2. Kwabena Fosuhene Mosner-Ansong, **Daniel Yaw Addai Duah**, Samuel Amos-Abanyie, Ayisha Ida Baffoe-Ashun (2024). Climate Change Threats and Public Perceptions Towards Energy Security in Sub-Saharan Africa: The Narrative from Ghana. https://doi.org/10.1007/978-3-031-69606-0_6

3. Kwabena Fosuhene Mosner-Ansong, **Daniel Yaw Addai Duah**, Samuel Amos-Abanyie, Ayisha Ida Baffoe-Ashun (2024). Towards Reducing Residential Electric Energy End-Use Wastage in Developing Countries: The Case of Ghana. https://doi.org/10.1007/978-3-031-69606-0_1

4. D. Opoku, **D. Y. A. Duah**, S. Amos-Abanyie, T. E. Kwofie (2024). Towards an Adoption Framework for Indigenous Building Materials Usage in Housing Delivery in Urban/Peri-Urban Areas of Ghana: A Theoretical Review. https://doi.org/10.1007/978-3-031-69606-0_20

5. A. D. Ampadu-Asiamah, S. Amos-Abanyie, K. Abrokwah Gyimah, E. Ayebeng Botchway, **D. Y. A. Duah** (2023). Application of Situation Awareness Theory to the Development of an Assessment Framework for Indoor Environmental Quality in Classroom. https://doi.org/10.1007/978-3-031-25998-2_3

6. Maria Panta, Joseph Agyei Danquah, **Daniel Duah**, Alexander Marful (2023). Rethinking the Curriculum in Architectural Education in a Global Habitat: The Case of the Trans-African Dialogues Series. *Sustainable development goals series*. https://doi.org/10.1007/978-3-031-36640-6_53

7. A. D. Ampadu-Asiamah, S. Amos-Abanyie, E. A. Botchway, **D. Y. A. Duah**, K. B. Gyimah (2022). Adoption of Indoor Environmental Quality Assessment Framework for Naturally Ventilated Classrooms in Basic Schools in Ghana. https://doi.org/10.1007/978-3-030-90973-4_10

8. D. M. Dok-Yen, **D. Y. A. Duah**, M. N. Addy (2022). Assessing the Level of Sustainable Affordable Housing Consciousness Using Frugal Innovation. https://doi.org/10.1007/978-3-030-90973-4_11

9. Justice Kwame Offei-Nketiah, Titus Ebenezer Kwofie, **Daniel Yaw Addai Duah** (2019). Regulatory Distress: Architects' Perspective on Enforcement of Building Regulations in Ghana. https://doi.org/10.1007/978-3-030-26528-1_23

10. **DYA Duah** (2013). Information Barriers in Home Energy Retrofit Adoption: Research In Progress. *1st Residential Building Design and Construction Conference, Pennsylvania State University*.

11. **DYA Duah** (2013). Knowledge Elicitation from Home Energy Retrofit Experts: A Delphi Approach.

International High Performance Building Education and Technology Conference (IHPB 2013).

12. **DYA Duah** (2013). Standard Criteria For Determining A Home Energy Retrofit Expert: Research In Progress. *Michigan State University Graduate Academic Conference, East Lansing, Michigan*.
13. **D Duah** (2012). Developing a Decision Support System for Cost Effective Energy Retrofits in Homes. *International Conference on Infrastructure Development in Africa, Kumasi, Ghana*.

Reports 3

1. **D Duah** (2014). Change Order Guidelines for Electrical and Low Voltage Contractors. *Electri International*. https://www.bauwise.com/wp-content/uploads/2024/01/123_F3405achangeorders.pdf
2. **DYA Duah** (2012). Construction Project Management, in Civil Engineering, [Eds. Kiyoshi Horikawa, Qizhong Guo]. *Encyclopedia of Life Support Systems (EOLSS)*.
3. **D Duah** (2012). Smart Grid: Installation and Construction Management Aspects for Electrical Contractors. *ELECTRI International*.

Theses 4

1. **D DUAH** (2020). COLLEGE OF HUMANITIES AND SOCIAL SCIENCES SCHOOL OF BUSINESS. *DEPARTMENT OF ACCOUNTING AND FINANCE, KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY*. https://scholar.google.com/scholar?cluster=16459572947439894886&hl=en&oi=scholarr
2. **D DUAH** (2016). Executive Master of Business Administration. *Department of Marketing and Corporate Strategy, Kwame Nkrumah University of Science and Technology, Kumasi*. https://scholar.google.com/scholar?cluster=13618065397066173211&hl=en&oi=scholarr
3. **D DUAH** (2016). Exploring the influence of service scape on customer satisfaction in the Ghanaian hospitality industry: a case study of Golden Tulip Kumasi. *KNUST*. https://scholar.google.com/scholar?cluster=14443386499225537704&hl=en&oi=scholarr
4. **DYA Duah** (2014). Intelligent decision support system framework for energy retrofits in existing homes. *Michigan State University*. https://search.proquest.com/openview/99fa14d598b724ce1779601a6711194f/1?pq-origsite=gscholar&cbl=18750

Other publications 1

1. Michael Nii Addy, S Amos-Abanyie, FYA Ellis, **DYA Duah** (2023). Correction to: An Analysis of Influence of Information-Sharing Behavioural Factors on Information Asymmetry in PPP Projects. *International Conference on Infrastructure Development in Africa*.