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Qualifications

Civil and Architectural Engineering, Ph.D, Aarhus University
1 Jan 2015 → 26 Mar 2018
Award Date: 26 Mar 2018

Architectural Design, Theory and Technology, Ph.D, University of Palermo
1 Jan 2015 → 26 Mar 2018
Award Date: 26 Mar 2018

Research outputs

A critical comparison of concepts and approaches to social sustainability in the construction industry

Kristoffersen, A. E., Schultz, C. P. L. & Kamari, A., 15 Aug 2024, In: *Journal of Building Engineering* . 91, 68 p., 109530.

DEVELOPING A BUILDING SIMULATION IDENTITY CARD FOR ENHANCED SAFETY AND COLLABORATION IN EMERGENCY EVACUATION SIMULATION

Jahangir, M. F., Kamari, A. & Schultz, C. P. L., Jul 2024, *Proceedings of the 2024 European Conference on Computing in Construction*. p. 128-135 8 p.

The Anatomy of an Architect's Argument: Formally Capturing Socially-Oriented Design Intentions in the Built Environment

Zayed, Y. N. H., Kristoffersen, A. E., Lohm, G., Kamari, A. & Schultz, C. P. L., Jul 2024, *Proceedings of the 2024 European Conference on Computing in Construction*. Srećković, M., Kassem, M., Soman, R. & Chassiakos, A. (eds.). p. 268-275 8 p.

Experimental measurement and validation of louvred opening for ventilation

Bugenings, L. A., Ostmann, P., Kamari, A. & Rong, L., Apr 2024, *ROOMVENT 2024*. 8 p.

A review of drivers and barriers of Digital Twin adoption in building project development processes

Jahangir, M. F., Schultz, C. P. L. & Kamari, A., Mar 2024, In: *Journal of Information Technology in Construction*. 29, p. 141-178 38 p.

From Decision Theory to Informed Decision-Making in the Design of Sustainable High-Performance Buildings

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Comparison of social quality criteria in building sustainability certification systems

Kristoffersen, A. E., Kamari, A. & Petersen, S., Sept 2023. 1 p.

Toward adapting sustainability certification systems for historical building: A comparative study of Italian-GBC-HB and Danish-GBC

Karimi, F. & Kamari, A., Sept 2023. 1 p.

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The Potential of Voluntary Sustainability Class to Leverage Sustainability in the Danish Construction Industry

Bruun Eriksen, F. & Kamari, A., May 2023, In: *Green Building & Construction Economics*. 4, 1, 15 p.

How can LCA inform early-stage design to meet Danish regulations? The sustainability opportunity metric

Kamari, A. & Schultz, C. P. L., Mar 2023, *ECPPM 2022 - eWork and eBusiness in Architecture, Engineering and Construction 2022: Proceedings of the 14th European Conference on Product and Process Modelling (ECPPM 2022)*, September 14-16, 2022, Trondheim, Norway. Hjelseth, E., F. Sujan, S. & J Scherer, R. (eds.). London: CRC Press, p. 27-34 8 p.

Systems-Oriented Building Design (S.O.B.D.): A new way of storytelling on the design of high-performance buildings for sustainable tomorrow

Kamari, A., Mar 2023, *PLEA 2022: Proceedings of the International Conference on Passive and Low Energy Architecture*. Bustamante, W., Andrade, M. & Ortiz E., P. (eds.). Vol. 2. p. 872-877 6 p.

Overheating in existing and renovated Danish terraced houses

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Overheating in existing and renovated Danish single- and multi-family houses

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Sustainability Rating Systems for Historic Buildings: A Systematic Review

Karimi , F., Valibeig, N., Memarian, G. & Kamari, A., Oct 2022, In: *Sustainability*. 14, 19, 22 p., 12448.

A BIM-based LCA tool for sustainable building design during the early design stage

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Integrated informed design processes: A mapping of building performance criteria in the Danish conventional design practice

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A combined principal component analysis and clustering approach for exploring enormous renovation design spaces

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Bioclimatic Architecture Strategies in Denmark: A Review of Current and Future Directions

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Special Issue "Bioclimatic Architecture for Building Renovation"

Kamari, A. (Editor) & Jensen, S. R. (Editor), 28 Jan 2022, (Buildings).

Digital Sustainability in Building Design: Special issue

Kamari, A. (Editor), Schultz, C. P. L. (Editor) & Petersen, S. (Editor), 2022, (Sustainability).

IPD and BIM-focussed methodology in renovation of heritage buildings

Brahmi, B. F., Boudemagh, S. S., Kitouni, I. & Kamari, A., 2022, In: *Construction Management and Economics*. 40, 3, p. 186-206 21 p.

An alternative approach to material and EPD mapping in the development of BIM-based LCA and LCC tools

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Popularizing DGNB in the Danish construction industry: A field study of the industry via a qualitative comparative analysis

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Sustainability Key Performance Indicators' (KPIs) assessment and visualization aimed at architects in (early) renovation design processes

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Towards integration of LCA and LCC as a driver for decision-making by municipalities for sustainable renovation of existing buildings

Abu-Ghaida, H., Andersen, L. V., Wandahl, S. & Kamari, A., 7 Sept 2021.

Diversity in Renovation Design: Theoretical Foundations of the Renovation Domain Model

Schultz, C. P. L. & Kamari, A., Jul 2021, In: *Journal of Computing in Civil Engineering*. 35, 4, 04021006.

Understanding the Benefits of BIM/Lean/IPD framework when carried-out simultaneously

Machado, C. S., Brahmi, B. F. & Kamari, A., 23 Feb 2021, *Proceedings of the 54th International Conference of the Architectural Science Association (ANZAScA)*. p. 1273–1282 10 p.

PARADIS - A process integrating tool for rapid generation and evaluation of holistic renovation scenarios

Kamari, A., Kirkegaard, P. H. & Schultz, C. P. L., Feb 2021, In: *Journal of Building Engineering*. 34, 101944.

Sustainable renovation of heritage buildings through IPDish and BIM: a case Study

Brahmi, B. F., Boudemagh, S. S., Kitouni, I. & Kamari, A., Feb 2021, *Proceedings of the 54th International Conference of the Architectural Science Association (ANZAScA)*. p. 1026-1035 10 p.

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Kamari, A., Paari, A. & Torvund, H. Ø., Jan 2021, In: *Sustainability (Switzerland)*. 13, 1, p. 1-24 24 p., 249.

Digital technologies as a catalyst to elevating IPD+BIM synergy in sustainable renovation of heritage buildings

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Exploring Blind Spots in Collaborative Value Creation in Building Design: A Creativity Perspective

Biskjaer, M. M., Kamari, A., Jensen, S. R. & Kirkegaard, P. H., 2021, In: *CoDesign: International Journal of CoCreation in Design and the Arts*. 17, 4, p. 374-391 18 p.

Navigating the vast landscape of spatially valid renovation scenarios

Kamari, A., Li, B. & Schultz, C. P. L., 2021, *ECPPM 2021 - eWork and eBusiness in Architecture, Engineering and Construction: Proceedings of the 13th European Conference on Product & Process Modelling (ECPPM 2021), 15-17 September 2021, Moscow, Russia*. Semenov, V. & Scherer, R. J. (eds.). CRC Press/Balkema, p. 163-170 8 p.

Value Diversity as a Driver for Renovation Design Support: A Clustering-Based Approach to Accelerate the Exploration of Design Space

Kamari, A., Kirkegaard, P. H. & Schultz, C. P. L., 2021, *Proceedings of the 18th International Conference on Computing in Civil and Building Engineering: ICCCBE 2020*. Toledo Santos, E. & Scheer, S. (eds.). Cham: Springer, p. 207-227 21 p. (Lecture Notes in Civil Engineering, Vol. 98).

The impact of kinetic facades on building occupants: Psychological state and cognitive performance

Petersen, S., Szabo, A., Armoutaki, K., Kamari, A. & Kirkegaard, P. H., Sept 2020, *35th Passive Low-Energy Architecture (PLEA)*.

The social housing sector is the key to achieving climate targets

Wandahl, S., Jensen, S. R. & Kamari, A., Feb 2020, *Profile 2020*. Bruun, J. (ed.). Aarhus: Aarhus Universitet, Institut for Ingeniørvidenskab, p. 50-51 2 p.

Development of a BIM-based LCA Tool to Support Sustainable Building Design during the Early Design Stage

Kotula, B. M. & Kamari, A., 2020, *ANZAScA 2020 - 54th International Conference of the Architectural Science Association: Imaginable Futures: Design Thinking, and the Scientific Method*. Ghaffarianhoseini, A., Ghaffarianhoseini, A. & Naismith, N. (eds.). Auckland: The Architectural Science Association, p. 395-404 10 p.

Holistic Building Design: An integrated building design methodology based on systems thinking for reaching sustainability

Kamari, A. & Kirkegaard, P. H., 2020, *Anthropologic - Architecture and Fabrication in the cognitive age*. Vol. 1. p. 505-514 10 p.

Almensektoren er nøgleordet for at komme i mål med klimamålene

Wandahl, S., Jensen, S. R., Kamari, A. & Entwistle, J. M., 11 Aug 2019, In: *Jyllandsposten*, JP Århus.

Development of a rating scale to measuring the KPIs in the generation and evaluation of holistic renovation scenarios

Kamari, A. & Kirkegaard, P. H., Aug 2019, In: *I O P Conference Series: Earth and Environmental Science*. 294, 1, 19 p., 012043.

Sustainable Building renovation: towards a holistic tectonics thinking framework in sustainable transformation of built environment by (through) renovation

Kamari, A. & Kirkegaard, P. H., Jul 2019, *Structures and architecture: bridging the gap and crossing borders*. J. S. Cruz, P. (ed.). Leiden: CRC Press, p. 83-91 9 p.

Constraint-based renovation design support through the renovation domain model

Kamari, A., Schultz, C. P. L. & Kirkegaard, P. H., May 2019, In: *Automation in Construction*. 104, p. 265-280 16 p.

A Holistic Multi-Methodology for Sustainable Renovation

Kamari, A., Jensen, S. R., Corrao, R. & Kirkegaard, P. H., Jan 2019, In: *International Journal of Strategic Property Management*. 23, 1, p. 50-64 15 p.

Added values in building renovation: an interdisciplinary research agenda

Petersen, S., Wandahl, S., Kirkegaard, P. H., Gabel, C. H., Jensen, S. R., Elholm, G., Rasmussen, M. K., Kamari, A., Sigsgaard, T. & Neve, H. H., 2019, *SBE 19 Malta: Sustainability & Resilience*. Borg, R. P. & Spiteri Staines, C. (eds.). SBE Malta - Sustainable Built Environment Malta, p. 138-139 2 p.

BIM-adoption within Small and Medium Enterprises (SMEs): An existing BIM-gap in the building sector

Makowski, P., Kamari, A. & Kirkegaard, P. H., 2019, *Proceedings of the 36th International Conference of CIB W78, Newcastle-upon-Tyne, UK, 18-20 September*. p. 265-274 10 p.

Potential shift of Integrated Design (ID) through BIM in Sustainable Building Renovation

Kamari, A. & Kirkegaard, P. H., 2019, In: *I O P Conference Series: Earth and Environmental Science*. 329, conference 1, 10 p., 012025.

Sustainable building renovation: Towards a holistic tectonics thinking framework in the sustainable transformation of the built environment by (through) renovation

Kamari, A. & Kirkegaard, P. H., 2019, *Structures and Architecture - Bridging the Gap and Crossing Borders: Proceedings of the Fourth International Conference on Structures and Architecture (ICSA 2019)*. Cruz, P. J. S. (ed.). London: CRC Press, p. 83-90 8 p. (Structures and Architecture, Vol. 1).

Towards a BIM-based Decision Support System for rapid generation and evaluation of holistic renovation scenarios

Kamari, A., Schultz, C. P. L. & Kirkegaard, P. H., 2019, In: *CIB Proceedings*. p. 244-254 11 p., 24.

Unleashing the diversity of conceptual building renovation design: Integrating high-fidelity simulation with rapid constraint-based scenario generation

Kamari, A., Schultz, C. P. L. & Kirkegaard, P. H., 2019, *SimAUD 2019. 2019 Proceedings of the Symposium on Simulation for Architecture & Urban Design: 10th anniversary edition*. Rockcastle, S., Rakha, T., Cerezo Davila, C., Papanikolaou, D. & Zakula, T. (eds.). San Diego: The Society for Modeling and Simulation International (SCS), Vol. 51. p. 29-36 8 p.

A BIM-based decision support system for the evaluation of holistic renovation scenarios

Kamari, A., Laustsen, C., Petersen, S. & Kirkegaard, P. H., 27 Nov 2018, In: *Journal of Information Technology in Construction*. 23, 1, p. 354-380 27 p.

Towards generation of holistic renovation scenarios using Multiple Criteria Decision Making – Case of Energy Consumption, Investment Cost, and Indoor Comfort

Kamari, A., Leonhard Christensen, M., Jensen, S., Petersen, S. & Kirkegaard, P. H., 13 Sept 2018, *International Conference for Sustainable Design of the Built Environment, SDBE 2018: Proceedings*. Elsharkawy, H., Zahiri, S. & Clough, J. (eds.). British Council, p. 37-48 12 p. 113

NovaDM: Towards a formal, unified Renovation Domain Model for the generation of holistic renovation scenarios

Kamari, A., Schultz, C. P. L. & Kirkegaard, P. H., Sept 2018, *eWork and eBusiness in Architecture, Engineering and Construction - Proceedings of the 12th European Conference on Product and Process Modelling, ECPPM 2018: Proceedings of the 12th European Conference on Product and Process Modelling (ECPPM 2018)*. Karlshoj, J. & Scherer, R. (eds.). CRC Press/Balkema, p. 197-205 9 p.

Building Information Modeling (BIM) 02, Further exploration in Architecture, Engineering and Construction: Civil and Architectural Engineering, Technical Report CAE-TR-4

Kamari, A. (Editor) & Kirkegaard, P. H. (Editor), 7 Aug 2018, Aarhus: Department of Engineering, Aarhus University. 63 p. (Technical Report; No. 4, Vol. 5).

Towards generation of holistic renovation scenarios using Multiple Criteria Decision Making

Kamari, A. & Kirkegaard, P. H., 7 Jun 2018.

Developing Holistic Renovation: Unpacking how value can be created in sustainable renovation processes

Kamari, A., Petersen, S., Wandahl, S. & Kirkegaard, P. H., Jun 2018, *ENERGY RENOVATION OF BUILDINGS : Retrofitting Buildings for Cost, Comfort and Climate*. State of Green, p. 14-15 2 p.

A multi-methodology and sustainability-supporting framework for implementation and assessment of a holistic building renovation: Implementation and assessment of a holistic sustainable building renovation

Kamari, A., 25 Apr 2018, Aarhus University: Department of Engineering, Aarhus University. 358 p. (PhD thesis).

A hybrid Decision Support System for Generation of Holistic Renovation Scenarios - Cases of Energy Consumption, Investment Cost, and Thermal Indoor Comfort

Kamari, A., Jensen, S., Leonhard Christensen, M., Petersen, S. & Kirkegaard, P. H., 19 Apr 2018, In: *Sustainability*. 10, 4, 23 p., 1255.

A multi-methodology and sustainability-supporting framework for implementation and assessment of a holistic building renovation

Kamari, A., Mar 2018, Aarhus: Department of Engineering, Aarhus University. 360 p.

Tectonic Sustainable Building Design for the Development of Renovation Scenarios – Analysis of ten European renovation research projects

Kamari, A., Corrao, R., Petersen, S. & Kirkegaard, P. H., Feb 2018, *Proceedings of Seismic and Energy Renovation for Sustainable Cities: SER4SC*. Margani, G., Rodono, G. & Sapienza, V. (eds.). EdicomEdizioni, p. 645-656 12 p.

Towards the development of a Decision Support System (DSS) for building renovation: Domain Mapping Matrix (DMM) for sustainability renovation criteria and renovation approaches

Kamari, A., Corrao, R. & Kirkegaard, P. H., Feb 2018, *Proceedings of the Seismic and Energy Renovation For Sustainable Cities: SER4SC*. Margani, G., Rodono, G. & Sapienza, V. (eds.). EdicomEdizioni, p. 564-576 13 p.

Sustainable Renovation Framework: Introducing three levels of Integrated Design Process Implementation and Evaluation

Kamari, A., Corrao, R., Petersen, S. & Kirkegaard, P. H., Jul 2017, *Proceedings of 33rd PLEA International Conference: Design to Thrive, PLEA 2017*. Brotas, L., Roaf, S. & Nicol, F. (eds.). Network for Comfort and Energy Use in Buildings (NCEUB), Vol. 1. p. 748-755 8 p.

Towards a holistic Approach to Retrofitting: A Critical Review of State-of-the-art Evaluation Methodologies for Architectural Transformation

Jensen, S. R., Kamari, A., Strange, A. & Kirkegaard, P. H., Jun 2017, *World Sustainable Built Conference 2017 - Conference Proceedings: WSBE17 Hong Kong – Transforming Our Built Environment through Innovation and Integration: Putting Ideas into Action*. Hong Kong: Construction Industry Council and Hong Kong Green Building Council Limited, p. 689-696 8 p.

Towards a Holistic Methodology in Sustainable Retrofitting: Theory, Implementation and Application

Kamari, A., Jensen, S. R., Corrao, R. & Kirkegaard, P. H., Jun 2017, *World Sustainable Built Environment Conference 2017 - Conference Proceedings: WSBE17 Hong Kong - Transforming Our Built Environment through Innovation and Integration: Putting Ideas into Action*. Hong Kong: Construction Industry Council and Hong Kong Green Building Council Limited, p. 702-708 7 p.

Sustainability focused decision-making in building renovation

Kamari, A., Corrao, R. & Kirkegaard, P. H., 25 May 2017, In: *International Journal of Sustainable Built Environment*. 6, 2, p. 330-350 21 p.

Arkitektur & Renovering

Jensen, S. R., Gabel, C. H., Elholm, G., Neve, H. H., Kamari, A., Petersen, S., Wandahl, S., Kirkegaard, P. H., Sigsgaard, T. & Strange, A., 27 Apr 2017. 1 p.

Holistisk bygningsrenovering

Kamari, A., Gabel, C. H., Elholm, G., Neve, H. H., Jensen, S. R., Petersen, S., Wandahl, S., Kirkegaard, P. H. & Sigsgaard, T., 27 Apr 2017. 1 p.

Building Information Modeling (BIM) for Indoor Environmental Performance Analysis: Civil and Architectural Engineering

Kirkegaard, P. H. (Editor) & Kamari, A. (Editor), Mar 2017, Aarhus: Department of Engineering, Aarhus University. 86 p. (Technical Report; No. 3, Vol. 4).

CIB W78: 32nd international conference in "Information Technology for Construction", Eindhoven, Netherlands, October 2015

Kamari, A., Dec 2016, In: *Infolio*. 33, p. 65-66 2 p.

Eco sustainability: a holistic structure, showing ample opportunities to achieve sustainable human development

pereira, T. & Kamari, A., 23 Nov 2015.

Prizes

Best research paper award

Kamari, A. (Recipient) & Kotula, B. M. (Recipient), 27 Nov 2020

Best research paper award

Kamari, A. (Recipient), 7 Aug 2019

Fully funded double degree Ph.D position

Kamari, A. (Recipient), Mar 2016

Fully funded Ph.D scholarship

Kamari, A. (Recipient), Nov 2014

Projects

Exploring and developing novel design approaches for natural wind ventilation of housing stocks in Denmark

Kamari, A. (PI) & Bugenings, L. A. (Participant)

01/07/2021 → 30/06/2024

REGREEN (H2020): Fostering nature-based solutions for equitable, green and healthy urban transitions in Europe and China

Kamari, A. (Collaborator)

02/09/2019 → 31/08/2023

RECOncILe: Reducing Energy Use in the Construction and Operation of Public Buildings

Kamari, A. (Participant)

01/10/2020 → 31/10/2022

PROBONO (H2020): The Integrator-centric approach for realising innovative energy efficient buildings in connected sustainable green neighbourhoods

Schultz, C. P. L. (PI), Kamari, A. (PI), Lohm, G. (CoPI), Sanderson, H. (CoPI), Larsen, P. G. (CoPI), Zayed, Y. N. H. (Participant) & Kristoffersen, A. E. (Participant)

01/01/2022 → 31/12/2026

ReVALUE: Value Creation by Energy Renovation, Refurbishment and Transformation of the Built Environment - Modelling and Validating of Utility and Architectural Value

Kamari, A. (Participant)

01/02/2016 → 30/06/2020

Employment

Associate Professor

Department of Civil and Architectural Engineering - Building Science

Aarhus University

Aarhus C, Denmark

2 Nov 2023 → present

Associate Professor

DIGIT

Aarhus University

Aarhus N, Denmark

20 Jul 2022 → present

Associate Professor

iCLIMATE Aarhus University Interdisciplinary Centre for Climate Change - iCLIMATE Aarhus University Interdisciplinary Centre for Climate Change, Navitas

Aarhus University

Aarhus C, Denmark

12 Dec 2018 → present