

Analyzing the fulfillment of daylight and overheating requirements in residential and office buildings in Estonia

Sepulveda Luque, Abel; De Luca, Francesco; Thalfeldt, Martin; Kurnitski, Jarek Building and environment 2020 / art. 107036, 12 p <https://doi.org/10.1016/j.buildenv.2020.107036> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Assessing the applicability of the European standard EN 17037:2018 for office spaces in a cold climate

Sepulveda Luque, Abel; De Luca, Francesco; Varjas, Toivo; Kurnitski, Jarek Building and environment 2022 / art. 109602 <https://doi.org/10.1016/j.buildenv.2022.109602> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Benchmark of methods for annual glare risk assessment

Sepulveda Luque, Abel; Bueno, Bruno; Wang, Taoning; Wilson, Helen Rose Building and environment 2021 / art. 108006 <https://doi.org/10.1016/j.buildenv.2021.108006> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Building cluster optimization to integrate energy performance and outdoor thermal comfort

De Luca, Francesco; Naboni, Emanuele; Lobaccaro, Gabriele; Sepulveda Luque, Abel 2020 Proceedings of the Symposium on Simulation for Architecture and Urban Design 2020 / p. 345-348 : ill https://www.simaud.org/proceedings/download.php?f=SimAUD2020_Proceedings_HiRes.pdf

Daylight and overheating prediction formulas for building design in a cold climate

Sepulveda Luque, Abel; De Luca, Francesco; Kurnitski, Jarek Journal of building engineering 2022 / art. 103532, 15 p. : ill <https://doi.org/10.1016/j.jobe.2021.103532> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Delightful daylighting : a framework for describing the experience of daylighting in Nordic homes and 'coupling it with quantitative assessments

Viikberg, Hanna; Sepulveda Luque, Abel; De Luca, Francesco Energies 2022 / art. 1815 <https://doi.org/10.3390/en15051815> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Easy-to-implement simulation strategies for dynamic glare risk assessment based on the European Daylighting Standard

Bueno, Bruno; Sepulveda Luque, Abel 17th International Conference of the International Building Performance Simulation Association (BS 2021), Bruges, Belgium, 1 – 3 September 2021 : proceedings 2021 / p. 1195-1202 [17th International Conference of the International Building Performance Simulation Association \(BS 2021\), Bruges, Belgium, 1 – 3 September 2021](https://doi.org/10.26868/25222708.2021.30208) <https://doi.org/10.26868/25222708.2021.30208>

Evaluating outdoor thermal comfort using a mixed-method to improve the environmental quality of a university campus

Eslamirad, Nasim; Sepulveda Luque, Abel; De Luca, Francesco; Lylykangas, Kimmo Sakari Energies 2022 / art. 1577, 26 p. : ill <https://doi.org/10.3390/en15041577> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Holistic approach to design healthy and resilient apartments

Sepulveda Luque, Abel; Smirnov, Roman; Donaire Galiano, María Dolores REHVA European HVAC Journal 2022 / p. 63-69 <https://www.rehva.eu/rehva-journal/chapter/holistic-approach-to-design-healthy-and-resilient-apartments>

Machine learning approach versus prediction formulas to design healthy dwellings in a cold climate

Sepulveda Luque, Abel; Eslamirad, Nasim; De Luca, Francesco eCAADe 2023 : Digital Design Reconsidered : Proceedings of the 41st Conference on Education and Research in Computer Aided Architectural Design in Europe ; vol. 2 Proceedings of the International Conference on Education and Research in Computer Aided Architectural Design in Europe 2023 / p. 359-368 <https://doi.org/10.52842/conf.ecaade.2023.2.359> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Machine learning-based optimization design workflow based on obstruction angles for building facades

Sepulveda Luque, Abel; Eslamirad, Nasim; Seyed Salehi, Seyed Shahabaldin; Thalfeldt, Martin; De Luca, Francesco Regenerating the City Performance-driven and Simulation-based Computational Design for Sustainable Cities and Communities : proceedings of the 9th Regional International Symposium on Education and Research in Computer Aided Architectural Design in Europe, Tallinn University of Technology, 15-16 June 2023 2023 / p. 15-24 <https://digikogu.taltech.ee/et/Item/c29fc911-ec34-45da-afe6-bc1e8515e15d>

Methodology for improving wind comfort in a cold region through modular urban elements

Eslamirad, Nasim; De Luca, Francesco; Sepulveda Luque, Abel; Lylykangas, Kimmo Sakari Regenerating the city : performance-driven and simulation-based computational design for sustainable cities and communities 2023 / p. 5-14 <https://digikogu.taltech.ee/et/Item/c29fc911-ec34-45da-afe6-bc1e8515e15d>

A multi-objective optimization workflow based on solar access and solar radiation for the design of building envelopes in cold climates

Sepulveda Luque, Abel; De Luca, Francesco 2020 Proceedings of the Symposium on Simulation for Architecture and Urban Design 2020 / p. 131–138 : ill http://www.simaud.org/proceedings/download.php?f=SimAUD2020_Proceedings_LowRes.pdf

Multi-performance method for urban densification

Sepulveda Luque, Abel; Eslamirad, Nasim; De Luca, Francesco Proceedings of Building Simulation 2023 : 18th Conference of IBPSA 2023 / p. 1169-1176 https://publications.ibpsa.org/conference/paper/?id=bs2023_1307

Multi-performance optimization of static shading devices for glare, daylight, view and energy consideration

De Luca, Francesco; Sepulveda Luque, Abel; Varjas, Toivo Building and environment 2022 / art. 109110

<https://doi.org/10.1016/j.buildenv.2022.109110> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A novel multi-criteria method for building massing based on energy performance and solar access : the mixed solar envelope (MSE) method

Sepulveda Luque, Abel; De Luca, Francesco Co-creating the future: inclusion in and through design ; Vol. 1 2022 / p. 649-658 : ill

<https://doi.org/10.52842/conf.ecaade.2022.1.649> <https://www.researchgate.net/publication/363503843> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

A novel multi-criteria workflow based on reverse solar envelopes for the design of residential clusters

Sepulveda Luque, Abel; De Luca, Francesco Proceedings of the 2022 Annual Modeling and Simulation Conference, ANNSIM

2022 2022 / p. 475-486 : ill <https://doi.org/10.23919/ANNSIM55834.2022.9859537>

A novel workflow for early design stages to ensure daylight and summer thermal comfort in buildings = Uudne töövoog projekteerimise algfaasis, et tagada päevavalgus ja suvine soojusmugavus hoonetes

Sepulveda Luque, Abel 2022 <https://doi.org/10.23658/taltech.34/2022> <https://digikogu.taltech.ee/et/Item/9d383d7b-f702-490a-a054-bbdfb238e402> https://www.ester.ee/record=b5503220*est

Outdoor thermal comfort optimization in a cold climate to mitigate the level of urban heat island in an urban area

Eslamirad, Nasim; Sepulveda Luque, Abel; De Luca, Francesco; Lylykangas, Kimmo Sakari; Ben Yahia, Sadok Energies

2023 / art. 4546, 28 p. : ill <https://doi.org/10.3390/en16124546> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Reverse solar envelope method. A new building form-finding method that can take regulatory frameworks into account

De Luca, Francesco; Dogan, Timur; Sepulveda Luque, Abel Automation in construction 2021 / art. 103518, 18 p. : ill

<https://doi.org/10.1016/j.autcon.2020.103518> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Solar radiation-based method for early design stages to balance daylight and thermal comfort in office buildings

Sepulveda Luque, Abel; Seyed Salehi, Seyed Shahabaldin; De Luca, Francesco; Thalfeldt, Martin Frontiers of architectural

research 2023 / p. 1030 - 1046 <https://doi.org/10.1016/j.foar.2023.07.001> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Static Shading Optimization for Glare Control and Daylight

De Luca, Francesco; Sepulveda Luque, Abel; Varjas, Toivo Proceedings of the 39th eCAADe Conference - Towards a new,

configurable architecture : University of Novi Sad, Novi Sad, Serbia, 8-10 September 2021. Vol. 2 2021 / p. 419-428

<https://doi.org/10.52842/conf.ecaade.2021.2.419> https://papers.cumincad.org/cgi-bin/works/paper/ecaade2021_230 [Conference proceedings at Scopus](#) [Article at Scopus](#)

Urban Shaderade. Building space analysis method for energy and sunlight consideration in urban environments

De Luca, Francesco; Sepulveda Luque, Abel Computer-Aided Architectural Design. INTERCONNECTIONS: Co-computing

Beyond Boundaries. CAAD Futures 2023 : 20th International Conference, Delft, The Netherlands, July 5–7, 2023 : Selected Papers

2023 / p. 317-332 https://doi.org/10.1007/978-3-031-37189-9_21 [Conference proceedings at Scopus](#) [Article at Scopus](#)