Advanced solar envelope generation
De Luca, Francesco Regenerative design in digital practice : a handbook for the built environment 2019 / p. 123-128 : ill Regenerative...

Advances in climatic form finding in architecture and urban design
De Luca, Francesco Energies 2023 / art. 3935 https://doi.org/10.3390/en16093935

Analysis of the insolation criteria for nearly-zero energy buildings in Estonia
Voll, Hendrik; **De Luca, Francesco**; Pavlovas, Vitalis Science and technology for the built environment 2016 / p. 939-950 : ill http://dx.doi.org/10.1080/23744731.2016.1195657

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

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

Building morphology influence on outdoor comfort in urban environments. An analysis through machine learning
Eslamirad, Nasim; **De Luca, Francesco**; **Lylykangas, Kimmo Sakari** Proceedings of the 12th Annual Symposium on Simulation for Architecture and Urban Design 2021 http://www.simaud.org/2021/program.php

Challenges and ways forward for performance-driven and simulation-based computational design for sustainable cities and communities
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. 189-192 https://digikogu.taltech.ee/et/Item/c29fc911-ec34-45da-afe6-bc1e8515e15d

Classification of the energy production potential of water lens solar concentrators using machine learning
Zarrinkafsh, Hamidreza; **Eslamirad, Nasim**; **De Luca, Francesco** Journal of Physics: Conference Series 2021 / art. 012022 https://doi.org/10.1088/1742-6596/2042/1/012022 Conference proceeding at Scopus Article at Scopus Article at WOS

Comparison of static and dynamic shading systems for office buildings energy consumption and cooling load assessment
De Luca, Francesco; **Voll, Hendrik**; **Thalfeldt, Martin** Management of environmental quality : an international journal 2018 / p. 978-998 : ill https://doi.org/10.1108/MEQ-01-2018-0008 Journal metrics at Scopus Article at Scopus

Computational method for variable objectives and context aware solar envelopes generation
De Luca, Francesco; **Voll, Hendrik** 2017 Proceedings of the Symposium on Simulation for Architecture and Urban Design 2017 / p. 335-342 : ill http://resolver.tudelft.nl/uuid:4857e388-c354-47a3-9671-0bd8038f76bc

A computational workflow for generating a voxel-based design approach based on subtractive shading envelopes and attribute information of point cloud data
Alkadri, Miktha Farid; **De Luca, Francesco**; Turrin, Michel; Sariyildiz, Sevil Remote sensing 2020 / art. 2561 ; 28 p. : ill https://doi.org/10.3390/rs12162561 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Concentrated solar power (CSP) for sustainable architecture to supply domestic hot water and heating loads of buildings
Zarrinkafsh, Hamidreza; **Eslamirad, Nasim**; **De Luca, Francesco** Journal of physics : conference series 2021 / art. 012110, p. 1-6 : ill https://doi.org/10.1088/1742-6596/2042/1/012110 Conference Proceedings at Scopus Article at Scopus Article at WOS

Data generative machine learning model for the assessment of outdoor thermal and wind comfort in a northern urban environment
Eslamirad, Nasim; **De Luca, Francesco**; **Lylykangas, Kimmo Sakari**; **Ben Yahia, Sadok** Frontiers of architectural research 2023 / p. 541-555 : ill https://doi.org/10.1016/j.foar.2022.12.001

Data-driven urban modelling : the case of explainable detection of urban heat island = Andmepõhine linnamodelleerimine : soojussaarte seletatav tuvastamine
Eslamirad, Nasim 2023 https://www.ester.ee/record=b5645371*est https://doi.org/10.23658/taltech.68/2023 https://digikogu.taltech.ee/et/Item/ff9725f6-fc34-474c-ad5b-0ed6128127ee https://www.ester.ee/record=b5645371*est

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

Daylighting and energy performance design for single floor commercial hall buildings
De Luca, Francesco; **Simson, Raimo**; **Voll, Hendrik**; **Kurnitski, Jarek** Management of environmental quality : an international journal 2018 / p. 722-739 : ill https://doi.org/10.1108/MEQ-10-2017-0110 Journal metrics at Scopus Article at Scopus

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

Digital tools to support district regenerative design and scale jumping
Naboni, Emanuele; **De Luca, Francesco** Scale Jumping: Regenerative Systems Thinking within the Built Environment. A guidebook for regenerative implementation: Interactions, tools, platforms, metrics, practice 2021 / p. 179−196 https://www.eurestore.eu/wp-content/uploads/2021/10/Restore-WG5.pdf

Dynamic calculations of thermal bridges in curtain wall and its effects on cooling loads and thermal delay
Cahyadi, Muhammad Rafif; Alkadri, Miktha Farid; **De Luca, Francesco** Human-Centric : Proceedings of the 28th International Conference on Computer-Aided Architectural Design Research in Asia (CAADRIA 2023), 21-23 March 2023 ; vol. 2 2023 / p. 441–450 : ill https://doi.org/10.52842/conf.caadria.2023.2.441

Early design clustering method considering equitable daylight distribution in the adaptive re-use of heritage buildings
Szentesi-Nejur, Szende; **De Luca, Francesco**; Nejur, Andrei; **Madelat, Payam** eCAADe 2023: Digital Design Reconsidered: Proceedings of the 41st Conference on Education and Research in Computer Aided Architectural Design in Europe 2023 / p. 105-114 https://doi.org/10.52842/conf.ecaade.2023.2.105

eCAADe RIS 2023 : Regenerating the City Performance-driven and Simulationbased 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, 15-16 June 2023, Tallinn University of Technology
2023 https://digikogu.taltech.ee/et/Item/c29fc911-ec34-45da-afe6-bc1e8515e15d

Electric lighting predictions in the energy calculation methods
De Luca, Francesco; **Simson, Raimo**; **Voll, Hendrik**; **Kurnitski, Jarek** Improving energy efficiency in commercial buildings and smart communities 2020 / p. 123-141 https://doi.org/10.1007/978-3-030-31459-0_9

Emergent, adaptive and responsive urban landscape design strategies
De Luca, Francesco Acta architecturae naturalis = Maastikuarhitektuurseid uurimusi 2018 / p. 20–32 : ill http://www.maastikuarhitektuur.ee/index.php/acta/article/view/51 https://www.ester.ee/record=b2731314*est

Energy and daylighting performance design of skylights and clerestories in a large hall retail building
De Luca, Francesco; **Simson, Raimo**; **Kurnitski, Jarek** CLIMA 2016 - proceedings of the 12th REHVA World Congress. Vol. 2 2016 / [10] p. : ill http://vbn.aau.dk/files/233715392/paper_655.pdf

Environmental performance-driven urban design: parametric design method for the integration of daylight and urban comfort analysis in cold climates
De Luca, Francesco Computer-aided architectural design. "Hello, Culture" : 18th International Conference, CAAD Futures 2019, Daejeon, Republic of Korea, June 26–28, 2019 : selected papers 2019 / p. 15-31 https://doi.org/10.1007/978-981-13-8410-3_2 Conference proceedings at Scopus Article at Scopus Article at WOS

Evaluating daylight factor standard through climate based daylight simulations and overheating regulations in Estonia
De Luca, Francesco; **Kiil, Martin**; **Simson, Raimo**; **Kurnitski, Jarek**; **Murula, Rein** Proceedings of Building Simulation 2019 : 16th IBPSA International Conference and Exhibition, 2-4 Sept., Rome 2020 / p. 3968-3975 : ill https://doi.org/10.26868/25222708.2019.210915

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

Experiments on Microclimatically adapt a courtyard to climate change
Naboni, Emanuele; Siani, Rossella; Turrini, Marcello; Touloupaki, Elefteria; Gherri, Barbara; **De Luca, Francesco** Iop Conference Series: Earth and Environmental Science 2023 / art. 012032 https://doi.org/10.1088/1755-1315/1196/1/012032

Facade-floor-cluster methodology for determining optimal building clusters for solar access and floor plan layout in

urban environments
De Luca, Francesco; Nejur, Andrei; Dogan, Timur Computing for a better tomorrow : eCAADe 2018 : proceedings of the 36th International Conference on Education and Research in Computer Aided Architectural Design in Europe : 19th-21st September 2018, Łódź, Poland, Faculty of Civil Engineering, Architecture and Environmental Engineering, Lodz University of Technology ; Vol. 2 2018 / p. 585-594 https://doi.org/10.52842/conf.ecaade.2018.2.585 Conference Proceedings at Scopus Article at Scopus

From envelope to layout : buildings massing and layout generation for solar access in urban environments
De Luca, Francesco ShoCK! : Sharing of Computable Knowledge : proceedings of the 35th International Conference on Education and Research in Computer Aided Architectural Design in Europe : 20th-22nd September 2017, Rome, Italy. Volume 2 2017 / p. 431-440 : ill

From near real-time urban data to an explainable city-scale model to help reduce the Urban Heat Island (UHI) effect
Eslamirad, Nasim; **De Luca, Francesco**; **Ben Yahia, Sadok**; **Lylykangas, Kimmo Sakari** Journal of Physics: Conference Series 2023 / art. 092012, p. 1-6 : ill https://doi.org/10.1088/1742-6596/2600/9/092012

From repetition to diversity: A workflow for energy-driven optimization of heterogeneous urban blocks in hot climates
Natanian, Jonathan; **De Luca, Francesco**; Naboni, Emanuele Will Cities Survive? PLEA STGO 2022 : Book of proceedings : online sessions 2022 / p. 842-847 : ill https://plea2022.org/wp-content/uploads/2023/03/PROCEEDING-ONLINE-FINAL-MARZO.pdf

Geoprocess of geospatial urban data in Tallinn, Estonia
Eslamirad, Nasim; **De Luca, Francesco**; **Lylykangas, Kimmo Sakari**; **Ben Yahia, Sadok** Data in brief 2023 / art. 109172, 13 p. : ill https://doi.org/10.1016/j.dib.2023.109172

Horizontal or vertical? Windows' layout selection for shading devices optimization
De Luca, Francesco; **Voll, Hendrik**; **Thalfeldt, Martin** Management of environmental quality : an international journal 2016 / p. 623-633 : ill http://dx.doi.org/10.1108/MEQ-05-2015-0102

An integrated approach to subtractive solar envelopes based on attribute information from point cloud data
Alkadri, Miktha Farid; **De Luca, Francesco**; Turrin, Michel; Sariyildiz, Sevil Renewable and sustainable energy reviews 2020 / art. 109742, 19 p. : ill https://doi.org/10.1016/j.rser.2020.109742 http://resolver.tudelft.nl/uuid:be100809-acfd-4489-8e26-7a35731d514b Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Integrated architectural and environmental performance - driven form-finding. A teaching case study in Montreal
Szentesi-Nejur, Szende; **De Luca, Francesco**; Nejur, Andrei 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. 105–114 : ill https://doi.org/10.52842/conf.ecaade.2021.2.105 Conference Proceedings at Scopus Article at Scopus

An integrated computational method for calculating dynamic thermal bridges of building facades in tropical countries
Cahyadi Agung, Muhammad Rafif; Alkadri, Miktha Farid; **De Luca, Francesco** Frontiers of architectural research 2024 / p. 201-218 : ill https://doi.org/10.1016/j.foar.2023.11.003

Learning performance-driven design. Students approach integrating urban form studies and building performance analysis
De Luca, Francesco Proceedings of Building Simulation 2019 : 16th IBPSA International Conference and Exhibition, 2-4 Sept., Rome 2020 / p. 1609-1616 : ill https://doi.org/10.26868/25222708.2019.210579

Lusikast linnani
De Luca, Francesco Sirp 2015 / lk. 26 : fot

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 2023 / p. 359-368 https://doi.org/10.52842/conf.ecaade.2023.2.359

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

Making use of point cloud for generating subtractive solar envelopes
Alkadri, Miktha Farid; **De Luca, Francesco**; Turrin, Michel; Sariyildiz, Sevil eCAADe SIGraDi 2019 - Architecture in the Age of the 4th Industrial Revolution. Vol. 1 2019 / p. 633-640 : ill http://papers.cumincad.org/data/works/att/ecaadesigradi2019_061.pdf https://doi.org/10.5151/proceedings-ecaadesigradi2019_061 Conference proceedings at Scopus Article at Scopus Article at WOS

Methodology for determining fenestration ranges for daylight and energy efficiency in Estonia
De Luca, Francesco; Dogan, Timur; **Kurnitski, Jarek** 2018 Proceedings of the symposium on simulation for architecture and urban design 2018 / p. 63–70 : ill http://www.simaud.org/proceedings/

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

Multi-objective optimization for daylight retrofit
De Luca, Francesco; Wortmann, Thomas eCAADe 2020 : Anthropologic – Architecture and Fabrication in the cognitive age : Proceedings of the 38th eCAADe Conference : Education and research in Computer Aided Architectural Design in Europe, Berlin, Germany, 16-17 September 2020 2020 / p. 57-66 : ill http://ecaade.org/downloads/eCAADe2020_volume1-print.pdf http://papers.cumincad.org/cgi-bin/works/paper/ecaade2020_272 Conference proceeding at Scopus Article at Scopus Article at WOS

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 solar envelope method based on solar ordinances for urban planning
De Luca, Francesco; Dogan, Timur Building Simulation 2019 / p. 817 - 834 https://doi.org/10.1007/s12273-019-0561-1 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

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-bbdbf238e402 https://www.ester.ee/record=b5503220*est

Outdoor comfort analysis in a University Campus during the warm season and parametric design of mitigation strategies for Resilient Urban Environments
De Luca, Francesco Computer-Aided Architectural Design. Design Imperatives: The Future is Now. CAAD Futures 2021 2022 / p. 473-493 https://doi.org/10.1007/978-981-19-1280-1_29 Conference proceedings at Scopus Article at Scopus Article at WOS

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

Overheating and daylighting evaluation for free-running classroom designs
Kiil, Martin; **Simson, Raimo**; **De Luca, Francesco**; **Thalfeldt, Martin**; **Kurnitski, Jarek** IOP conference series : earth and environmental science 2019 / art. 012059, 7 p. : ill https://doi.org/10.1088/1755-1315/352/1/012059 Conference proceedings at Scopus Article at Scopus

Quick protocol for integrating the attribute information of unstructured point cloud data into a solar envelope simulation
Alkadri, Miktha Farid; **De Luca, Francesco**; Turrin, Michela; Agung, Muhammad Rafif Cahyadi Journal of green building 2023 / p. 3-15 : ill https://doi.org/10.3992/jgb.18.4.3

Relationship analysis and optimisation of space layout to improve the energy performance of office buildings

Du, Tiantian; Turrin, Michela; Jansen, Sabine; Dobbelsteen, Andy van den; **De Luca, Francesco** Energies 2022 / art. 1268 https://doi.org/10.3390/en15041268 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

Risen from the dead : from slumming to gentrification
Hiob, Mart; **Nutt, Nele**; **Nurme, Sulev**; **De Luca, Francesco** Transylvanian review of administrative sciences 2012 / p. 92-105 : ill https://www.researchgate.net/publication/283139084_Risen_from_the_Dead_From_Slumming_to_Gentrification

The role of building morphology on pedestrian level comfort in Northern climate
Eslamirad, Nasim; **De Luca, Francesco**; **Lylykangas, Kimmo Sakari** Journal of physics : conference series 2021 / art. 012053, p. 1-6 : ill https://doi.org/10.1088/1742-6596/2042/1/012053 Journal metrics at Scopus Article at Scopus Article at WOS

Simulation based daylight uniformity optimizations for elementary school projects in Quebec province
Szentesi-Nejur, Szende; **De Luca, Francesco**; Flamand, Krystel Co-creating the Future : Inclusion in and through Design - Proceedings of the 40th Conference on Education and Research in Computer Aided Architectural Design in Europe (eCAADe 2022), Ghent, 13-16 September 2022 ; Vol. 1 2022 / p. 639-647 https://doi.org/10.52842/conf.ecaade.2022.1.639 Conference Proceedings at Scopus Article at Scopus

The Solar Block Generator : an additive parametric method for solar driven urban block design
Natanian, Jonathan; **De Luca, Francesco**; Wortmann, Thomas; Capeluto, Guedi Journal of Physics: Conference Series 2021 / art. 012049 https://doi.org/10.1088/1742-6596/2042/1/012049 Conference Proceedings at Scopus Article at Scopus Article at WOS

Solar collection multi-isosurface method : computational design advanced method for the prediction of direct solar access in urban environments
De Luca, Francesco; **Voll, Hendrik** Computer-Aided Architectural Design : Future Trajectories : 17th International Conference, CAAD Futures 2017, Istanbul, Turkey, July 12-14, 2017 : selected papers 2017 / p. 170-187 : ill https://doi.org/10.1007/978-981-10-5197-5_10

Solar collection multi-isosurface method : computational design advanced method for the prediction of direct solar access in urban environments
De Luca, Francesco; **Voll, Hendrik** Future Trajectories of Computation in Design : 17th International Conference, CAAD Futures 2017, Istanbul, July 12-14, 2017 : proceedings 2017 / p. 225 http://caadfutures2017.itu.edu.tr/wp-content/uploads/2017/09/CAADFutures2017_Proceedings-updated-20092017.pdf

Solar envelope optimization method for complex urban environments
De Luca, Francesco CAADence in architecture : back to command : proceedings of the International Conference on Computer Aided Architectural Design : 16-17 June 2016, Budapest, Hungary, Faculty of Architecture, Budapest University of Technology and Economics. 2nd ed 2016 / p. 195-201 : ill http://dx.doi.org/10.3311/CAADence.1657

Solar form finding : subtractive solar envelope and integrated solar collection computational method for high-rise buildings in urban environments
De Luca, Francesco Acadia 2017 : Disciplines & Disruption : proceedings of the 37th Annual Conference of the Association for Computer Aided Design in Architecture 2017 / p. 212-221 : ill

Solar insolation requirement the reason for overheating in nearly zero energy apartment buildings
Voll, Hendrik; **Tamm, Kristel**; **De Luca, Francesco** Advanced Building Skins : 12th Conference on Advanced Building Skins, 2-3 October 2017, Bern, Switzerland 2017 / p. 785-787 : ill

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 https://doi.org/10.1016/j.foar.2023.07.001

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

Sun and wind : integrated environmental performance analysis for building and pedestrian comfort
De Luca, Francesco SimAUD 2019 : 2019 Proceedings of the Symposium on Simulation for Architecture & Urban Design : 10th Anniversary Edition 2019 / p. 3-10 : ill http://www.simaud.org/proceedings/download.php?f=SimAUD2019_Proceedings_HiRes.pdf

Tall buildings cluster form rationalization in a Nordic climate by factoring in indoor-outdoor comfort and energy

De Luca, Francesco; Naboni, Emanuele; Lobaccaro, Gabriele Energy and buildings 2021 / art. 110831, 16 p. : ill https://doi.org/10.1016/j.enbuild.2021.110831 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Tropical responsive envelopes for urban heat island mitigation in tropical countries. A proposed workflow for integrated environmental digital simulation
Irsyad, Naufal Andi; Alkadri, Miktha Farid; **De Luca, Francesco**; Arif, Muhammad; Heinzelmann, Florian eCAADe 2023: Digital Design Reconsidered: Proceedings of the 41st Conference on Education and Research in Computer Aided Architectural Design in Europe 2023 / p. 249–258 https://doi.org/10.52842/conf.ecaade.2023.2.249

Understanding computational methods for solar envelopes based on design parameters, tools, and case studies : a review
Alkadri, Miktha Farid; **De Luca, Francesco**; Turrin, Michel; Sariyildiz, Sevil Energies 2020 / art. 3302, 25 p. : ill https://doi.org/10.3390/en13133302 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Urban planning principles of nearly zero-energy residential buildings in Estonia
Voll, Hendrik; **Thalfeldt, Martin**; **De Luca, Francesco**; **Kurnitski, Jarek**; **Olesk, Timo** Management of environmental quality - an international journal 2016 / p. 634-648 : ill http://dx.doi.org/10.1108/meq-05-2015-0101

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

Wind comfort analysis and design of small scale elements for improving urban space livability - a case study in Talinn, Estonia
Kazak, Jelena; **De Luca, Francesco**; **Partanen, Jenni Vilhelmiina** Co-creating the Future : Inclusion in and through Design - Proceedings of the 40th Conference on Education and Research in Computer Aided Architectural Design in Europe (eCAADe 2022), Ghent, 13-16 September 2022 , vol. 2 2022 https://doi.org/10.52842/conf.ecaade.2022.2.247 Conference Proceedings at Scopus Article at Scopus