## Holger Wallbaum

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/387596/publications.pdf

Version: 2024-02-01

85 papers 2,240 citations

236925 25 h-index 233421 45 g-index

88 all docs 88 docs citations

88 times ranked 2451 citing authors

| #  | Article  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Development of the ASHRAE Global Thermal Comfort Database II. Building and Environment, 2018, 142, 502-512.  | 6.9  | 279       |
| 2  | Impact of sustainable office buildings on occupant's comfort and productivity. Journal of Corporate Real Estate, 2013, 15, 7-34.   | 1.9  | 113       |
| 3  | Environmental product declarations entering the building sector: critical reflections based on 5 to 10Âyears experience in different European countries. International Journal of Life Cycle Assessment, 2015, 20, 1199-1212.    | 4.7  | 113       |
| 4  | A differentiated description of building-stocks for a georeferenced urban bottom-up building-stock model. Energy and Buildings, 2016, 120, 78-84.  | 6.7  | 94        |
| 5  | Environmental Impact of Buildingsâ€"What Matters?. Environmental Science & Technology, 2015, 49, 9832-9841.  | 10.0 | 87        |
| 6  | A component based bottom-up building stock model for comprehensive environmental impact assessment and target control. Renewable and Sustainable Energy Reviews, 2013, 20, 45-56.  | 16.4 | 85        |
| 7  | Accounting for the social dimension of sustainability: experiences from the biotechnology industry. Business Strategy and the Environment, 2006, 15, 334-346.  | 14.3 | 79        |
| 8  | Indicator based sustainability assessment tool for affordable housing construction technologies. Ecological Indicators, 2012, 18, 353-364.   | 6.3  | 73        |
| 9  | Multidimensional Pareto optimization as an approach for site-specific building refurbishment solutions applicable for life cycle sustainability assessment. International Journal of Life Cycle Assessment, 2013, 18, 1762-1779. | 4.7  | 71        |
| 10 | Harnessing stakeholder motivation: towards a Swiss sustainable building sector. Building Research and Information, 2011, 39, 504-517.  | 3.9  | 64        |
| 11 | A new systemic approach to improve the sustainability performance of office buildings in the early design stage. Energy and Buildings, 2015, 109, 385-396.   | 6.7  | 62        |
| 12 | Relative importance of electricity sources and construction practices in residential buildings: A Swiss-US comparison of energy related life-cycle impacts. Energy and Buildings, 2014, 68, 620-631.                             | 6.7  | 55        |
| 13 | Handling data uncertainties when using Swedish energy performance certificate data to describe energy usage in the building stock. Energy and Buildings, 2015, 102, 328-336.   | 6.7  | 53        |
| 14 | Socio-economic impact of renovation and energy retrofitting of the Gothenburg building stock. Energy and Buildings, 2016, 123, 41-49.  | 6.7  | 53        |
| 15 | Prioritizing Sustainability Criteria in Urban Planning Processes: Methodology Application. Journal of the Urban Planning and Development Division, ASCE, 2011, 137, 20-28.   | 1.7  | 50        |
| 16 | Sustainable Potential of Textile-Reinforced Concrete. Journal of Materials in Civil Engineering, 2015, 27, .   | 2.9  | 48        |
| 17 | Optimized maintenance and renovation scheduling in multifamily buildings – a systematic approach based on condition state and life cycle cost of building components. Construction Management and Economics, 2019, 37, 139-155.  | 3.0  | 48        |
| 18 | Rental price and sustainability ratings: which sustainability criteria are really paying back?. Construction Management and Economics, 2013, 31, 322-334.  | 3.0  | 47        |

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|----|--|------|-----------|
| 19 | Sustainability of Social Housing in Asia: A Holistic Multi-Perspective Development Process for Bamboo-Based Construction in the Philippines. Sustainability, 2016, 8, 151.   | 3.2  | 37        |
| 20 | A review of environmental impacts of winter road maintenance. Cold Regions Science and Technology, 2019, 158, 143-153.   | 3.5  | 35        |
| 21 | The importance of life-cycle based planning in maintenance and energy renovation of multifamily buildings. Sustainable Cities and Society, 2019, 44, 715-725.  | 10.4 | 34        |
| 22 | Sustainability and property valuation: a risk-based approach. Building Research and Information, 2010, 38, 280-300.  | 3.9  | 33        |
| 23 | Perceived contribution of indicator systems to sustainable development in developing countries. Sustainable Development, 2013, 21, 18-29.  | 12.5 | 33        |
| 24 | Investigation of regional conditions and sustainability indicators for sustainable product development of building materials. Journal of Cleaner Production, 2018, 196, 1356-1364.   | 9.3  | 31        |
| 25 | A service-life cycle approach to maintenance and energy retrofit planning for building portfolios.<br>Building and Environment, 2019, 160, 106212.   | 6.9  | 31        |
| 26 | Ways to get work done: a review and systematisation of simplification practices in the LCA literature. International Journal of Life Cycle Assessment, 2020, 25, 2154-2168.  | 4.7  | 26        |
| 27 | Factors for Eco-Efficiency Improvement of Thermal Insulation Materials. Key Engineering Materials, 0, 678, 1-13.   | 0.4  | 23        |
| 28 | Spatial analysis of urban material stock with clustering algorithms: A Northern European case study. Journal of Industrial Ecology, 2019, 23, 1328-1343.   | 5.5  | 23        |
| 29 | Life-Cycle Assessment of the Production of Swiss Road Materials. Journal of Materials in Civil Engineering, 2012, 24, 168-176.   | 2.9  | 22        |
| 30 | Prioritizing deep renovation for housing portfolios. Energy and Buildings, 2019, 202, 109361.  | 6.7  | 22        |
| 31 | Environmental performance of social housing in emerging economies: life cycle assessment of conventional and alternative construction methods in the Philippines. International Journal of Life Cycle Assessment, 2017, 22, 1785-1801. | 4.7  | 21        |
| 32 | Explorative life-cycle assessment of renovating existing urban housing-stocks. Building and Environment, 2019, 165, 106391.  | 6.9  | 19        |
| 33 | How Adding a Battery to a Grid-Connected Photovoltaic System Can Increase its Economic Performance: A Comparison of Different Scenarios. Energies, 2019, 12, 30.   | 3.1  | 18        |
| 34 | Spatiotemporal characteristics of residential material stocks and flows in urban, commuter, and rural settlements. Journal of Cleaner Production, 2020, 251, 119435.   | 9.3  | 18        |
| 35 | Preliminary investigation of a vapor-open envelope tailored for subtropical climate. Building and Environment, 2011, 46, 719-728.  | 6.9  | 17        |
| 36 | Life Cycle Assessment of Representative Swiss Road Pavements for National Roads with an Accompanying Life Cycle Cost Analysis. Environmental Science & Environmental Science, 2013, 47, 130718092515005.                               | 10.0 | 16        |

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|----|--|-----|-----------|
| 37 | EVALUATION OF STRATEGIC BUILDING MAINTENANCE AND REFURBISHMENT BUDGETING METHOD SCHROEDER. International Journal of Strategic Property Management, 2014, 18, 393-406.  | 1.8 | 16        |
| 38 | Scoping review of health in office design approaches. Journal of Corporate Real Estate, 2020, 22, 155-180.   | 1.9 | 16        |
| 39 | Building Inventory and Refurbishment Scenario Database Development for Switzerland. Journal of Industrial Ecology, 2018, 22, 629-642.  | 5.5 | 15        |
| 40 | Heat and moisture balance simulation of a building with vapor-open envelope system for subtropical regions. Building Simulation, 2012, 5, 301-314.   | 5.6 | 14        |
| 41 | Stakeholder Specific Multi-Scale Spatial Representation of Urban Building-Stocks. ISPRS International Journal of Geo-Information, 2018, 7, 173.  | 2.9 | 14        |
| 42 | Building Ownership, Renovation Investments, and Energy Performance—A Study of Multi-Family Dwellings in Gothenburg. Sustainability, 2018, 10, 1684.  | 3.2 | 14        |
| 43 | Trade-Off between the Social and Environmental Performance of Green Concrete: The Case of 6 Countries. Sustainability, 2018, 10, 2309.   | 3.2 | 14        |
| 44 | Cost-Optimal Maintenance and Renovation Planning in Multifamily Buildings with Annual Budget Constraints. Journal of Construction Engineering and Management - ASCE, 2020, 146, .                                    | 3.8 | 14        |
| 45 | Lessons from seven sustainability indicator programs in developing countries of Asia. Ecological Indicators, 2011, 11, 1385-1395.  | 6.3 | 13        |
| 46 | Constraints to implementation of sustainability indicator systems in five Asian cities. Local Environment, 2010, 15, 731-742.  | 2.4 | 12        |
| 47 | Environmental analysis of new construction and maintenance processes of road pavements in Switzerland. Structure and Infrastructure Engineering, 2014, 10, 1-24.   | 3.7 | 12        |
| 48 | Transforming cities and health: policy, action, and meaning. Cities and Health, 2020, 4, 135-151.  | 2.6 | 12        |
| 49 | On the usefulness of a cost-performance indicator curve at the strategic level for consideration of energy efficiency measures for building portfolios. Energy and Buildings, 2016, 119, 267-282.                    | 6.7 | 11        |
| 50 | The effect of different working parameters on the optimal size of a battery for grid-connected PV systems. Energy Procedia, 2017, 122, 595-600.  | 1.8 | 11        |
| 51 | Hidden Ecological Potentials in the Production of Materials for Swiss Road Pavements. Journal of Management in Engineering - ASCE, 2012, 28, 13-21.  | 4.8 | 9         |
| 52 | Towards a 2000 Watt society – assessing building-specific saving potentials of the Swiss residential building stock. International Journal of Sustainable Building Technology and Urban Development, 2012, 3, 43-49. | 1.0 | 9         |
| 53 | Regionalized environmental impacts of construction machinery. International Journal of Life Cycle Assessment, 2020, 25, 1472-1485.   | 4.7 | 9         |
| 54 | Hygrothermal performance of a vapor-open envelope for subtropical climate, field test and model validation. Building and Environment, 2016, 110, 55-64.  | 6.9 | 8         |

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|----|---|-----|-----------|
| 55 | Determining Material Suitability for Low-Rise Housing in the Philippines: Physical and Mechanical Properties of the Bamboo Species Bambusa blumeana. BioResources, 2017, 13, .  | 1.0 | 7         |
| 56 | Life cycle assessment of winter road maintenance. International Journal of Life Cycle Assessment, 2020, 25, 646-661.  | 4.7 | 7         |
| 57 | A Framework for User Centric LCA Tool Development for Early Planning Stages of Buildings. Frontiers in Built Environment, 0, 8, .   | 2.3 | 6         |
| 58 | Economic, ecological and thermo-hygric optimization of a vapor-open envelope for subtropical climates. Energy and Buildings, 2012, 55, 799-809.   | 6.7 | 5         |
| 59 | A Review of Swedish Residential Building Stock Research. International Journal of Environmental Sustainability, 2015, 10, 1-17.   | 0.3 | 4         |
| 60 | Machine learningâ€based stocks and flows modeling of road infrastructure. Journal of Industrial Ecology, 2022, 26, 44-57.   | 5.5 | 4         |
| 61 | Road Planning and Route Alignment Selection Criteria in the Norwegian Context. IOP Conference<br>Series: Materials Science and Engineering, 0, 471, 062007.   | 0.6 | 3         |
| 62 | Comparing Different PV Module Types and Brands Under Working Conditions in the United Kingdom. , 0, , .   |     | 3         |
| 63 | How Does Office Design Support Employees' Health? A Case Study on the Relationships among Employees' Perceptions of the Office Environment, Their Sense of Coherence and Office Design. International Journal of Environmental Research and Public Health, 2021, 18, 12779. | 2.6 | 3         |
| 64 | A Swedish comment on †review: the availability of life-cycle studies in Sweden'. International Journal of Life Cycle Assessment, 2019, 24, 1758-1759.   | 4.7 | 2         |
| 65 | Estimation of Norwegian Asphalt Surfacing Lifetimes Using Survival Analysis Coupled with Road Spatial Data. Journal of Transportation Engineering Part B: Pavements, 2019, 145, 04019017.   | 1.5 | 2         |
| 66 | Bridging the gap between assessment and action: recommendations for the effective use of LCA in the building process. IOP Conference Series: Earth and Environmental Science, 2020, 588, 022007.  | 0.3 | 2         |
| 67 | Improving indoor environmental quality (IEQ) for occupant health and well-being: A case study of Swedish office building. IOP Conference Series: Earth and Environmental Science, 2020, 588, 032072.  | 0.3 | 2         |
| 68 | The effect of highway geometry on fuel consumption of heavy-duty vehicles operating in eco-driving mode. , 2017, , .  |     | 2         |
| 69 | Bridging the data gap., 2004,,.   |     | 2         |
| 70 | Nutzer- und klimaangepasstes Bauen - Leitbild und Chance für die globale Verbreitung von nachhaltigen Gebädelösungen. Bautechnik, 2011, 88, 3-16.   | 0.1 | 1         |
| 71 | Identify Optimal Renovation Packages for Residential Buildings: A State-of-the-Art Computational Model. IOP Conference Series: Earth and Environmental Science, 2019, 297, 012018.  | 0.3 | 1         |
| 72 | Life Cycle Management of Infrastructures. Encyclopedia of the UN Sustainable Development Goals, 2021, , 678-693.  | 0.1 | 1         |

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|----|---|-----|-----------|
| 73 | Sabento Model: Social Assessment of Biotechnological Production. , 2006, , 207-213.   |     | 1         |
| 74 | DREEAM, Demonstration of an integrated Renovation approach for Energy Efficiency At the Multi building scale, Horizon2020. Impact, 2017, 2017, 23-25.                         | 0.1 | 1         |
| 75 | Smart and Sustainable Offices (SSO): Presentación de un enfoque holÃstico para implementar la próxima generación de oficinas. Informes De La Construccion, 2017, 69, 221.     | 0.3 | 1         |
| 76 | Life Cycle Management of Infrastructures. Encyclopedia of the UN Sustainable Development Goals, 2019, , 1-16.   | 0.1 | 1         |
| 77 | Emerging regulatory policies for eco-efficiency. , 2004, , .  |     | 1         |
| 78 | An Approach to Identify Resource Patterns on a Neighborhood Level. Eco-efficiency in Industry and Science, 2018, , 317-323.   | 0.1 | 0         |
| 79 | Health & wellbeing in offices - A study of literature on the Nordic perspective. IOP Conference Series:<br>Earth and Environmental Science, 2019, 297, 012013.                | 0.3 | 0         |
| 80 | Energy Efficiency Measures and Data Needs. The Case of the European Building Portfolio Owners. IOP Conference Series: Earth and Environmental Science, 2020, 503, 012101.     | 0.3 | 0         |
| 81 | Numerical and real-life assessment of the moisture safety of CLT structure with PIR insulation composite under the Swedish climate. E3S Web of Conferences, 2020, 172, 10004. | 0.5 | 0         |
| 82 | Impact of New European Facility Management Standards on Building Cost Structures. , 2011, , .   |     | 0         |
| 83 | Application of Industrial Maintenance Methods on Building Maintenance. , $2011,  ,  .$  |     | 0         |
| 84 | Estimating the Ground Temperature Around Energy Piles Using Artificial Neural Networks. Advances in Intelligent Systems and Computing, 2020, , 223-229.                       | 0.6 | 0         |
| 85 | Ecoprofit: Local Learning for Integrated Environmental Technologies. , 2007, , .  |     | 0         |