# Adlio R Gaspar

## List of Publications by Citations



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|---|---|---|---|
| 76 papers | 2,172 citations | 24 h-index | 45 g-index |
| 77 ext. papers | 2,561 ext. citations | 6.5 avg, IF | 5.35 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 76 | Review of passive PCM latent heat thermal energy storage systems towards buildings' energy efficiency. *Energy and Buildings*, **2013**, 59, 82-103 | 7 | 610 |
| 75 | A review on current advances in the energy and environmental performance of buildings towards a more sustainable built environment. *Renewable and Sustainable Energy Reviews*, **2017**, 77, 845-860 | 16.2 | 119 |
| 74 | Multi-dimensional optimization of the incorporation of PCM-drywalls in lightweight steel-framed residential buildings in different climates. *Energy and Buildings*, **2014**, 70, 411-421 | 7 | 98 |
| 73 | Review and future trends of solar adsorption refrigeration systems. *Renewable and Sustainable Energy Reviews*, **2014**, 39, 102-123 | 16.2 | 85 |
| 72 | Numerical evaluation of a radiant panel system for heating a high-ceiling room. *Extreme Physiology and Medicine*, **2015**, 4, A156 | | 78 |
| 71 | Evaluation of electrochromic windows impact in the energy performance of buildings in Mediterranean climates. *Energy Policy*, **2014**, 67, 68-81 | 7.2 | 71 |
| 70 | Review on performance aspects of nearly zero-energy districts. *Sustainable Cities and Society*, **2018**, 43, 406-420 | 10.1 | 56 |
| 69 | Control criteria of electrochromic glasses for energy savings in mediterranean buildings refurbishment. *Solar Energy*, **2016**, 134, 236-250 | 6.8 | 46 |
| 68 | Wind tunnel measurements and numerical simulations of water evaporation in forced convection airflow. *International Journal of Thermal Sciences*, **2014**, 86, 28-40 | 4.1 | 44 |
| 67 | An evolutionary strategy enhanced with a local search technique for the space allocation problem in architecture, Part 1: Methodology. *CAD Computer Aided Design*, **2013**, 45, 887-897 | 2.9 | 41 |
| 66 | Analysis of sensible heat exchanges from a thermal manikin. *European Journal of Applied Physiology* , **2004**, 92, 663-8 | 3.4 | 41 |
| 65 | An approach to the multi-level space allocation problem in architecture using a hybrid evolutionary technique. *Automation in Construction*, **2013**, 35, 482-498 | 9.6 | 38 |
| 64 | Physical modelling of globe and natural wet bulb temperatures to predict WBGT heat stress index in outdoor environments. *International Journal of Biometeorology*, **2009**, 53, 221-30 | 3.7 | 37 |
| 63 | Measurements of clothing insulation with a thermal manikin operating under the thermal comfort regulation mode: comparative analysis of the calculation methods. *European Journal of Applied Physiology*, **2008**, 104, 679-88 | 3.4 | 35 |
| 62 | An evolutionary strategy enhanced with a local search technique for the space allocation problem in architecture, Part 2: Validation and performance tests. *CAD Computer Aided Design*, **2013**, 45, 898-910 | 2.9 | 33 |
| 61 | A thermal performance parametric study of window type, orientation, size and shadowing effect. *Sustainable Cities and Society*, **2016**, 26, 456-465 | 10.1 | 32 |
| 60 | Experimental evaluation of the heat transfer through small PCM-based thermal energy storage units for building applications. *Energy and Buildings*, **2016**, 116, 18-34 | 7 | 32 |

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| 59 | Dynamic clothing insulation. Measurements with a thermal manikin operating under the thermal comfort regulation mode. *Applied Ergonomics*, **2011**, 42, 890-9 | 4.2 | 32 |
| 58 | A review of empirical data of sustainability initiatives in university campus operations. *Journal of Cleaner Production*, **2020**, 250, 119558 | 10.3 | 31 |
| 57 | Estimation of renewable energy and built environment-related variables using neural networks A review. *Renewable and Sustainable Energy Reviews*, **2018**, 94, 959-988 | 16.2 | 28 |
| 56 | Analysis of natural and forced convection heat losses from a thermal manikin: Comparative assessment of the static and dynamic postures. *Journal of Wind Engineering and Industrial Aerodynamics*, **2014**, 132, 66-76 | 3.7 | 28 |
| 55 | Thermal transmittance effect on energy consumption of Mediterranean buildings with different thermal mass. *Applied Energy*, **2019**, 252, 113437 | 10.7 | 26 |
| 54 | Experimental study of the heat transfer through a vertical stack of rectangular cavities filled with phase change materials. *Applied Energy*, **2015**, 142, 192-205 | 10.7 | 26 |
| 53 | An integrated energy performance-driven generative design methodology to foster modular lightweight steel framed dwellings in hot climates. *Energy for Sustainable Development*, **2018**, 44, 21-36 | 5.4 | 25 |
| 52 | Comparative energy and exergy performance of heating options in buildings under different climatic conditions. *Energy and Buildings*, **2013**, 61, 288-297 | 7 | 24 |
| 51 | Automated approach for design generation and thermal assessment of alternative floor plans. *Energy and Buildings*, **2014**, 81, 170-181 | 7 | 23 |
| 50 | Energy and exergy-based indicators for the energy performance assessment of a hotel building. *Energy and Buildings*, **2012**, 52, 181-188 | 7 | 23 |
| 49 | An approach for energy performance and indoor climate assessment in a Portuguese school building. *Sustainable Cities and Society*, **2017**, 30, 184-194 | 10.1 | 22 |
| 48 | Convective heat transfer from a nude body under calm conditions: assessment of the effects of walking with a thermal manikin. *International Journal of Biometeorology*, **2012**, 56, 319-32 | 3.7 | 22 |
| 47 | How reliable are geometry-based building indices as thermal performance indicators?. *Energy Conversion and Management*, **2015**, 101, 561-578 | 10.6 | 21 |
| 46 | Exergetic analysis of a desiccant cooling system: searching for performance improvement opportunities. *International Journal of Energy Research*, **2014**, 38, 714-727 | 4.5 | 20 |
| 45 | Comparative energy and exergy performance assessments of a microcogenerator unit in different electricity mix scenarios. *Energy Conversion and Management*, **2013**, 73, 195-206 | 10.6 | 19 |
| 44 | Improving thermal performance of automatically generated floor plans using a geometric variable sequential optimization procedure. *Applied Energy*, **2014**, 132, 200-215 | 10.7 | 17 |
| 43 | The impact of thermal transmittance variation on building design in the Mediterranean region. *Applied Energy*, **2019**, 239, 581-597 | 10.7 | 17 |
| 42 | A mathematical model describing the two stages of low-pressure-vaporization of free water. *Journal of Food Engineering*, **2012**, 112, 274-281 | 6 | 16 |

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| 41 | Low-pressure-vaporization of free water—Characterization of the boiling regimes. *International Journal of Thermal Sciences*, **2014**, 77, 19-26 | 4.1 | 15 |
| 40 | Refrigerants used in the Portuguese food industry: Current status. *International Journal of Refrigeration*, **2017**, 83, 60-74 | 3.8 | 15 |
| 39 | A thermal energy storage system provided with an adsorption module—Dynamic modeling and viability study. *Energy Conversion and Management*, **2016**, 126, 548-560 | 10.6 | 13 |
| 38 | Performance-based design of multi-story buildings for a sustainable urban environment: A case study. *Renewable and Sustainable Energy Reviews*, **2019**, 113, 109243 | 16.2 | 13 |
| 37 | Subjective analysis of cold thermal environments. *Applied Ergonomics*, **2014**, 45, 534-43 | 4.2 | 13 |
| 36 | Calculation of view factors for complex geometries using Stokes—theorem. *Journal of Building Performance Simulation*, **2014**, 7, 203-216 | 2.8 | 12 |
| 35 | Occupational exposure to cold thermal environments: a field study in Portugal. *European Journal of Applied Physiology*, **2008**, 104, 207-14 | 3.4 | 12 |
| 34 | Modeling and parametric analysis of an adsorber unit for thermal energy storage. *Energy*, **2016**, 102, 83-94 | 7.9 | 12 |
| 33 | A review of the energy implications of passive building design and active measures under climate change in the Middle East. *Journal of Cleaner Production*, **2021**, 305, 127152 | 10.3 | 11 |
| 32 | The potential impact of low thermal transmittance construction on the European design guidelines of residential buildings. *Energy and Buildings*, **2018**, 178, 379-390 | 7 | 10 |
| 31 | Can movable PCM-filled TES units be used to improve the performance of PV panels? Overview and experimental case-study. *Energy and Buildings*, **2020**, 210, 109743 | 7 | 10 |
| 30 | Evaluation of occupational cold environments: field measurements and subjective analysis. *Industrial Health*, **2014**, 52, 262-74 | 2.5 | 9 |
| 29 | Assessment of the indoor environmental conditions of a baroque library in Portugal. *Energy Procedia*, **2017**, 133, 257-267 | 2.3 | 9 |
| 28 | An Approach to Urban Quarter Design Using Building Generative Design and Thermal Performance Optimization. *Energy Procedia*, **2015**, 78, 2899-2904 | 2.3 | 8 |
| 27 | Clustering of architectural floor plans: A comparison of shape—representations. *Automation in Construction*, **2017**, 80, 48-65 | 9.6 | 7 |
| 26 | Simulation of Occupancy and CO2-based Demand-controlled Mechanical Ventilation Strategies in an Office Room Using EnergyPlus. *Energy Procedia*, **2017**, 113, 51-57 | 2.3 | 7 |
| 25 | Globe Temperature and Its Measurement: Requirements and Limitations. *Annals of Work Exposures and Health*, **2019**, 63, 743-758 | 2.4 | 7 |
| 24 | Experimental study of the low-pressure-vaporization of water in different porous media. *International Journal of Heat and Mass Transfer*, **2013**, 65, 561-571 | 4.9 | 7 |

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| 23 | The contribution of ventilation on the energy performance of small residential buildings in the Mediterranean region. *Energy*, **2020**, 191, 116577 | 7.9 | 7 |
| 22 | An application of a multi-criteria decision support system to assess energy performance of school buildings. *Energy Procedia*, **2017**, 122, 667-672 | 2.3 | 6 |
| 21 | Optimization of a thermal energy storage system provided with an adsorption module – A GenOpt application in a TRNSYS/MATLAB model. *Energy Conversion and Management*, **2018**, 162, 90-97 | 10.6 | 6 |
| 20 | Assessment of thermal environments: Working conditions in the Portuguese ceramic industry in 1994 and 2012. *Work*, **2015**, 51, 457-70 | 1.6 | 6 |
| 19 | On the measurement of globe temperatures: analysis of the influence of different parameters. *Extreme Physiology and Medicine*, **2015**, 4, | | 6 |
| 18 | Assessment of thermal environments: working conditions in the portuguese glass industry. *Industrial Health*, **2018**, 56, 62-77 | 2.5 | 5 |
| 17 | Physical and experimental calibration of a mathematical model of the low-pressure-vaporization of free water. *Journal of Food Engineering*, **2014**, 138, 23-34 | 6 | 4 |
| 16 | Crawler excavator track repair: Track fastening – noise characterization and personal protection **2014**, 531-536 | | 4 |
| 15 | Crowdsourced Clustering of Computer Generated Floor Plans. *Lecture Notes in Computer Science*, **2015**, 142-151 | 0.9 | 4 |
| 14 | Energy performance factors in wastewater treatment plants: A review. *Journal of Cleaner Production*, **2021**, 322, 129107 | 10.3 | 4 |
| 13 | Thermal conditions in freezing chambers and prediction of the thermophysiological responses of workers. *International Journal of Biometeorology*, **2015**, 59, 1623-32 | 3.7 | 3 |
| 12 | Increasing the efficiency of high temperature furnaces through a topping cycle cogeneration – case study. *Energy Efficiency*, **2015**, 8, 85-95 | 3 | 2 |
| 11 | Lessons from unsuccessful energy and buildings sustainability actions in university campus operations. *Journal of Cleaner Production*, **2021**, 297, 126665 | 10.3 | 2 |
| 10 | Indoor climate assessment: A case study at a business incubation centre. *Sustainable Cities and Society*, **2016**, 26, 466-475 | 10.1 | 2 |
| 9 | Numerical recipes for successfully modeling the phase transitions in thermal energy storage adsorption systems. *Energy Storage*, **2019**, 1, e42 | 2.8 | 1 |
| 8 | Development, calibration and validation of a mathematical model for the low-pressure-vaporization of the water in porous media. *International Journal of Heat and Mass Transfer*, **2014**, 73, 574-585 | 4.9 | 1 |
| 7 | Development and validation of a computer program for simulation of the human body thermophysiological response **2012**, | | 1 |
| 6 | The importance of long-term hygrothermal assessment of museum spaces: method and application in a permanent exhibition in a historical building. *Conservar Patrimonio*, **2019**, 30, 91-105 | 0.4 | 1 |

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| 5 | Energy Audits and Energy Efficiency in Small Wastewater Treatment Plants: A Case Study **2020**, 766-777 | | 1 |
| 4 | Performance Analysis of a Solar DHW System with Adsorption Module Operating in Different World Locations. *Applied Sciences (Switzerland)*, **2019**, 9, 5480 | 2.6 | 0 |
| 3 | Daylighting simulation of a heritage building by comparing matrix methods and solar models. *Solar Energy*, **2021**, 224, 685-696 | 6.8 | 0 |
| 2 | Barriers on Establishing Passive Strategies in Office Spaces: A Case Study in a Historic University Building. *Sustainability*, **2021**, 13, 4563 | 3.6 | |
| 1 | Analysis of Specific Energy Consumption of Wastewater Treatment Plants in the North of Portugal **2021**, 361-369 | | |