# Mohamed Hamdy

## List of Publications by Citations



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| 39 papers | 1,661 citations | 16 h-index | 39 g-index |
| 39 ext. papers | 1,955 ext. citations | 5.5 avg, IF | 5.38 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 39 | A multi-stage optimization method for cost-optimal and nearly-zero-energy building solutions in line with the EPBD-recast 2010. *Energy and Buildings*, **2013**, 56, 189-203 | 7 | 289 |
| 38 | Assessing gaps and needs for integrating building performance optimization tools in net zero energy buildings design. *Energy and Buildings*, **2013**, 60, 110-124 | 7 | 253 |
| 37 | A performance comparison of multi-objective optimization algorithms for solving nearly-zero-energy-building design problems. *Energy and Buildings*, **2016**, 121, 57-71 | 7 | 185 |
| 36 | Applying a multi-objective optimization approach for Design of low-emission cost-effective dwellings. *Building and Environment*, **2011**, 46, 109-123 | 6.5 | 161 |
| 35 | A new methodology for investigating the cost-optimality of energy retrofitting a building category. *Energy and Buildings*, **2015**, 107, 456-478 | 7 | 130 |
| 34 | Comparison of the energy saving potential of adaptive and controllable smart windows: A state-of-the-art review and simulation studies of thermochromic, photochromic and electrochromic technologies. *Solar Energy Materials and Solar Cells*, **2019**, 200, 109828 | 6.4 | 91 |
| 33 | The impact of climate change on the overheating risk in dwellings□A Dutch case study. *Building and Environment*, **2017**, 122, 307-323 | 6.5 | 74 |
| 32 | Researching social acceptability of renewable energy technologies in Finland. *International Journal of Sustainable Built Environment*, **2013**, 2, 89-98 | | 68 |
| 31 | Social acceptance of renewable energy technologies for buildings in the Helsinki Metropolitan Area of Finland. *Renewable Energy*, **2016**, 99, 813-824 | 8.1 | 47 |
| 30 | Impact of adaptive thermal comfort criteria on building energy use and cooling equipment size using a multi-objective optimization scheme. *Energy and Buildings*, **2011**, 43, 2055-2067 | 7 | 46 |
| 29 | Impact of financial assumptions on the cost optimality towards nearly zero energy buildings □A case study. *Energy and Buildings*, **2017**, 153, 421-438 | 7 | 36 |
| 28 | The performance of small scale multi-generation technologies in achieving cost-optimal and zero-energy office building solutions. *Applied Energy*, **2015**, 152, 94-108 | 10.7 | 36 |
| 27 | A performance comparison of multi-objective optimization-based approaches for calibrating white-box building energy models. *Energy and Buildings*, **2020**, 216, 109942 | 7 | 34 |
| 26 | Multi-objective optimisation of an interactive buildings-vehicles energy sharing network with high energy flexibility using the Pareto archive NSGA-II algorithm. *Energy Conversion and Management*, **2020**, 218, 113017 | 10.6 | 25 |
| 25 | A multi-aid optimization scheme for large-scale investigation of cost-optimality and energy performance of buildings. *Journal of Building Performance Simulation*, **2016**, 9, 411-430 | 2.8 | 20 |
| 24 | A robustness-based decision making approach for multi-target high performance buildings under uncertain scenarios. *Applied Energy*, **2020**, 267, 114868 | 10.7 | 17 |
| 23 | Multi-Objective Optimization of Building Energy Design to Reconcile Collective and Private Perspectives: CO2-eq vs. Discounted Payback Time. *Energies*, **2017**, 10, 1016 | 3.1 | 16 |

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| 22 | Resilient cooling of buildings to protect against heat waves and power outages: Key concepts and definition. *Energy and Buildings*, **2021**, 239, 110869 | 7 | 16 |
| 21 | The Impact of Insulation and HVAC Degradation on Overall Building Energy Performance: A Case Study. *Buildings*, **2018**, 8, 23 | 3.2 | 13 |
| 20 | Twenty-year tracking of lighting savings and power density in the residential sector. *Energy and Buildings*, **2017**, 154, 113-126 | 7 | 13 |
| 19 | Impact of building envelope and mechanical component degradation on the whole building performance: a review paper. *Energy Procedia*, **2017**, 132, 321-326 | 2.3 | 13 |
| 18 | Optimum design of a house and its HVAC systems using simulation-based optimisation. *International Journal of Low-Carbon Technologies*, **2010**, 5, 120-124 | 2.8 | 13 |
| 17 | Methodology to assess business models of dynamic pricing tariffs in all-electric houses. *Energy and Buildings*, **2020**, 207, 109586 | 7 | 13 |
| 16 | An inverse modeling approach for the thermal response modeling of green fa□des. *Applied Energy*, **2019**, 235, 1447-1456 | 10.7 | 9 |
| 15 | Methodology for design decision support of cost-optimal zero-energy lightweight construction. *Energy and Buildings*, **2020**, 223, 110170 | 7 | 8 |
| 14 | Building performance optimization of net zero-energy buildings **2015**, 175-206 | | 7 |
| 13 | Upgrading the Smartness of Retrofitting Packages towards Energy-Efficient Residential Buildings in Cold Climate Countries: Two Case Studies. *Buildings*, **2020**, 10, 200 | 3.2 | 6 |
| 12 | Optimizing Hybrid Ventilation Control Strategies Toward Zero-Cooling Energy Building. *Frontiers in Built Environment*, **2019**, 5, | 2.2 | 6 |
| 11 | The impact of building automation control systems as retrofitting measures on the energy efficiency of a typical Norwegian single-family house. *IOP Conference Series: Earth and Environmental Science*, **2020**, 410, 012054 | 0.3 | 4 |
| 10 | Quantification of Energy Flexibility and Survivability of All-Electric Buildings with Cost-Effective Battery Size: Methodology and Indexes. *Energies*, **2021**, 14, 2787 | 3.1 | 3 |
| 9 | Thermal resilient buildings: How to be quantified? A novel benchmarking framework and labelling metric. *Building and Environment*, **2021**, 201, 108022 | 6.5 | 3 |
| 8 | Influence of chemical damp proof cream on the capillary action and microstructure of mortars. *Energy Procedia*, **2017**, 132, 670-675 | 2.3 | 2 |
| 7 | A Generic Pipeline for Machine Learning Users in Energy and Buildings Domain. *Energies*, **2021**, 14, 5410 | 3.1 | 2 |
| 6 | Simulation-Based Optimization for Energy and Buildings **2015**, 503-513 | | 1 |
| 5 | Wood burning habits and its effect on the electrical energy demand of a retrofitted Norwegian detached house. *IOP Conference Series: Earth and Environmental Science*, **2019**, 352, 012022 | 0.3 | 1 |

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| 4 | Predicting annual illuminance and operative temperature in residential buildings using artificial neural networks. *Building and Environment*, **2022**, 109031 | 6.5 | 0 |
| 3 | Net Zero Energy Buildings (NZEBs) Potential in MENA Region: Critical Review on Egypt Case. *Advances in Science, Technology and Innovation*, **2019**, 117-131 | 0.3 | |
| 2 | Challenges in the Modeling and Simulation of Green Buildings **2018**, 3-34 | | |
| 1 | Challenges in the Modeling and Simulation of Green Buildings **2018**, 1-33 | | |