# Xingxing Zhang

List of Publications by Year
in descending order

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|---|---|---|---|
| 109<br>papers | 5,173<br>citations | 109321<br>35<br>h-index | 88630<br>70<br>g-index |
| 112<br>all docs | 112<br>docs citations | 112<br>times ranked | 4534<br>citing authors |

| # | Article | IF | Citations |
|---|---------|-----|-----------|
| 1 | Recent development and application of thermoelectric generator and cooler. Applied Energy, 2015, 143, 1-25. | 10.1 | 602 |
| 2 | A review of data-driven approaches for prediction and classification of building energy consumption. Renewable and Sustainable Energy Reviews, 2018, 82, 1027-1047. | 16.4 | 488 |
| 3 | Review of R&amp;D progress and practical application of the solar photovoltaic/thermal (PV/T) technologies. Renewable and Sustainable Energy Reviews, 2012, 16, 599-617. | 16.4 | 348 |
| 4 | Indirect evaporative cooling: Past, present and future potentials. Renewable and Sustainable Energy Reviews, 2012, 16, 6823-6850. | 16.4 | 337 |
| 5 | A review of air filtration technologies for sustainable and healthy building ventilation. Sustainable Cities and Society, 2017, 32, 375-396. | 10.4 | 244 |
| 6 | A review of data centers as prosumers in district energy systems: Renewable energy integration and waste heat reuse for district heating. Applied Energy, 2020, 258, 114109. | 10.1 | 160 |
| 7 | Characterization of a solar photovoltaic/loop-heat-pipe heat pump water heating system. Applied Energy, 2013, 102, 1229-1245. | 10.1 | 124 |
| 8 | A review on opportunities for implementation of solar energy technologies in agricultural greenhouses. Journal of Cleaner Production, 2021, 285, 124807. | 9.3 | 122 |
| 9 | A review of thermal absorbers and their integration methods for the combined solar photovoltaic/thermal (PV/T) modules. Renewable and Sustainable Energy Reviews, 2017, 75, 839-854. | 16.4 | 103 |
| 10 | Dynamic performance of a novel solar photovoltaic/loop-heat-pipe heat pump system. Applied Energy, 2014, 114, 335-352. | 10.1 | 102 |
| 11 | Theoretical study of the performance of a novel PV/e roof module for heat pump operation. Energy Conversion and Management, 2011, 52, 603-614. | 9.2 | 101 |
| 12 | Techno-economic analysis of a solar photovoltaic/thermal (PV/T) concentrator for building application in Sweden using Monte Carlo method. Energy Conversion and Management, 2018, 165, 8-24. | 9.2 | 100 |
| 13 | Prediction of occupancy level and energy consumption in office building using blind system identification and neural networks. Applied Energy, 2019, 240, 276-294. | 10.1 | 100 |
| 14 | Theoretical investigation of the energy performance of a novel MPCM (Microencapsulated Phase) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 | 8.8 | 98 |
| 15 | A review of reinforcement learning methodologies for controlling occupant comfort in buildings. Sustainable Cities and Society, 2019, 51, 101748. | 10.4 | 96 |
| 16 | Transforming a residential building cluster into electricity prosumers in Sweden: Optimal design of a coupled PV-heat pump-thermal storage-electric vehicle system. Applied Energy, 2019, 255, 113864. | 10.1 | 92 |
| 17 | A systematic review of recent air source heat pump (ASHP) systems assisted by solar thermal, photovoltaic and photovoltaic/thermal sources. Renewable Energy, 2020, 146, 2472-2487. | 8.9 | 92 |
| 18 | A study on influential factors of occupant window-opening behavior in an office building in China. Building and Environment, 2018, 133, 41-50. | 6.9 | 84 |

| # | Article | IF | Citations |
|---|---------|-----|-----------|
| 19 | A review of urban energy systems at building cluster level incorporating renewable-energy-source (RES) envelope solutions. Applied Energy, 2018, 230, 1034-1056. | 10.1 | 81 |
| 20 | Design, fabrication and experimental study of a solar photovoltaic/loop-heat-pipe based heat pump system. Solar Energy, 2013, 97, 551-568. | 6.1 | 78 |
| 21 | Socio-economic performance of a novel solar photovoltaic/loop-heat-pipe heat pump water heating system in three different climatic regions. Applied Energy, 2014, 135, 20-34. | 10.1 | 67 |
| 22 | Life cycle assessment of a wooden single-family house in Sweden. Applied Energy, 2019, 251, 113253. | 10.1 | 64 |
| 23 | Operational performance of a novel heat pump assisted solar façade loop-heat-pipe water heating system. Applied Energy, 2015, 146, 371-382. | 10.1 | 60 |
| 24 | Analysis and interpretation of the particulate matter (PM10 and PM2.5) concentrations at the subway stations in Beijing, China. Sustainable Cities and Society, 2019, 45, 366-377. | 10.4 | 60 |
| 25 | Active Solar Thermal Facades (ASTFs): From concept, application to research questions. Renewable and Sustainable Energy Reviews, 2015, 50, 32-63. | 16.4 | 58 |
| 26 | A preliminary simulation study about the impact of COVID-19 crisis on energy demand of a building mix at a district in Sweden. Applied Energy, 2020, 280, 115954. | 10.1 | 58 |
| 27 | A coordinated control to improve performance for a building cluster with energy storage, electric vehicles, and energy sharing considered. Applied Energy, 2020, 268, 114983. | 10.1 | 58 |
| 28 | Solar-photovoltaic-power-sharing-based design optimization of distributed energy storage systems for performance improvements. Energy, 2021, 222, 119931. | 8.8 | 56 |
| 29 | IEA EBC Annex83 Positive Energy Districts. Buildings, 2021, 11, 130. | 3.1 | 55 |
| 30 | Cluster analysis for occupant-behavior based electricity load patterns in buildings: A case study in Shanghai residences. Building Simulation, 2017, 10, 889-898. | 5.6 | 52 |
| 31 | Characterizing Positive Energy District (PED) through a Preliminary Review of 60 Existing Projects in Europe. Buildings, 2021, 11, 318. | 3.1 | 46 |
| 32 | A novel reinforcement learning method for improving occupant comfort via window opening and closing. Sustainable Cities and Society, 2020, 61, 102247. | 10.4 | 43 |
| 33 | Global sensitivity analysis for key parameters identification of net-zero energy buildings for grid interaction optimization. Applied Energy, 2020, 279, 115820. | 10.1 | 37 |
| 34 | Occupant behavior modeling methods for resilient building design, operation and policy at urban scale: A review. Applied Energy, 2021, 293, 116856. | 10.1 | 37 |
| 35 | A Review on Recent Development of Cooling Technologies for Concentrated Photovoltaics (CPV) Systems. Energies, 2018, 11, 3416. | 3.1 | 36 |
| 36 | Experimental investigation of a polymer hollow fibre integrated liquid desiccant dehumidification system with aqueous potassium formate solution. Applied Thermal Engineering, 2018, 142, 632-643. | 6.0 | 35 |

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| 37 | Theoretical investigation of the thermal performance of a novel solar loop-heat-pipe faÃ§ade-based heat pump water heating system. Energy and Buildings, 2014, 77, 180-191. | 6.7 | 34 |
| 38 | Parallel experimental study of a novel super-thin thermal absorber based photovoltaic/thermal (PV/T) system against conventional photovoltaic (PV) system. Energy Reports, 2015, 1, 30-35. | 5.1 | 34 |
| 39 | A data-driven model predictive control for lighting system based on historical occupancy in an office building: Methodology development. Building Simulation, 2021, 14, 219-235. | 5.6 | 33 |
| 40 | Optimal Simulation of Three Peer to Peer (P2P) Business Models for Individual PV Prosumers in a Local Electricity Market Using Agent-Based Modelling. Buildings, 2020, 10, 138. | 3.1 | 31 |
| 41 | Numerical investigations and performance comparisons of a novel cross-flow hollow fiber integrated liquid desiccant dehumidification system. Energy, 2019, 182, 1115-1131. | 8.8 | 29 |
| 42 | Energy Waste in Buildings Due to Occupant Behaviour. Energy Procedia, 2017, 105, 2233-2238. | 1.8 | 26 |
| 43 | A hierarchical coordinated demand response control for buildings with improved performances at building group. Applied Energy, 2019, 242, 684-694. | 10.1 | 25 |
| 44 | Development of an adaptation table to enhance the accuracy of the predicted mean vote model. Building and Environment, 2020, 168, 106504. | 6.9 | 25 |
| 45 | Smart meter and in-home display for energy savings in residential buildings: a pilot investigation in Shanghai, China. Intelligent Buildings International, 2019, 11, 4-26. | 2.3 | 24 |
| 46 | Life Cycle Cost Analysis of a Single-Family House in Sweden. Buildings, 2021, 11, 215. | 3.1 | 24 |
| 47 | A review of factors affecting the efficiency of clean-in-place procedures in closed processing systems. Energy, 2019, 178, 57-71. | 8.8 | 23 |
| 48 | Digital Twin for Accelerating Sustainability in Positive Energy District: A Review of Simulation Tools and Applications. Frontiers in Sustainable Cities, 2021, 3, . | 2.4 | 23 |
| 49 | Experimental investigations of polymer hollow fibre integrated evaporative cooling system with the fibre bundles in a spindle shape. Energy and Buildings, 2017, 154, 166-174. | 6.7 | 22 |
| 50 | Case Study of Smart Meter and In-home Display for Residential Behavior Change in Shanghai, China. Energy Procedia, 2015, 75, 2694-2699. | 1.8 | 21 |
| 51 | The early design stage for building renovation with a novel loop-heat-pipe based solar thermal facade (LHP-STF) heat pump water heating system: Techno-economic analysis in three European climates. Energy Conversion and Management, 2015, 106, 964-986. | 9.2 | 21 |
| 52 | Design and experimental study of a novel air conditioning system using evaporative condenser at a subway station in Beijing, China. Sustainable Cities and Society, 2018, 43, 550-562. | 10.4 | 21 |
| 53 | Characteristic study of a novel compact Solar Thermal Facade (STF) with internally extruded pinâ€"fin flow channel for building integration. Applied Energy, 2016, 168, 48-64. | 10.1 | 20 |
| 54 | Experimental study on crystallization process and prediction for the latent heat of ice slurry generation based sodium chloride solution. Applied Energy, 2017, 185, 1948-1953. | 10.1 | 20 |

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|---|---------|-----|-----------|
| 55 | The reinforcement learning method for occupant behavior in building control: A review. Energy and Built Environment, 2021, 2, 137-148. | 5.9 | 20 |
| 56 | An early-stage analysis of climate-adaptive designs for multi-family buildings under future climate scenario: Case studies in Rome, Italy and Stockholm, Sweden. Journal of Building Engineering, 2020, 27, 100972. | 3.4 | 17 |
| 57 | Comparative study of a novel liquid–vapour separator incorporated gravitational loop heat pipe against the conventional gravitational straight and loop heat pipes – Part I: Conceptual development and theoretical analyses. Energy Conversion and Management, 2015, 90, 409-426. | 9.2 | 16 |
| 58 | Exploring the Potential of Climate-Adaptive Container Building Design under Future Climates Scenarios in Three Different Climate Zones. Sustainability, 2020, 12, 108. | 3.2 | 15 |
| 59 | Recent progress in research on $PM_{2.5}$ in subways. Environmental Sciences: Processes and Impacts, 2021, 23, 642-663. | 3.5 | 15 |
| 60 | Effect of connection mode and mass flux on the energy output of a PVT hot water system. Solar Energy, 2017, 158, 285-294. | 6.1 | 14 |
| 61 | Agent Based Modelling of a Local Energy Market: A Study of the Economic Interactions between Autonomous PV Owners within a Micro-Grid. Buildings, 2021, 11, 160. | 3.1 | 14 |
| 62 | Young urban households in Shanghai, China: Characteristics of energy use and attitudes. Sustainable Cities and Society, 2020, 60, 102174. | 10.4 | 14 |
| 63 | Study of the heat transport capacity of a novel gravitational loop heat pipe. International Journal of Low-Carbon Technologies, 2013, 8, 210-223. | 2.6 | 13 |
| 64 | An Investigation on Energy Consumption of Air Conditioning System in Beijing Subway Stations. Energy Procedia, 2017, 142, 2568-2573. | 1.8 | 13 |
| 65 | Life Cycle Cost of Building Energy Renovation Measures, Considering Future Energy Production Scenarios. Energies, 2019, 12, 2719. | 3.1 | 13 |
| 66 | Comparative study of a novel liquid–vapour separator incorporated gravitational loop heat pipe against the conventional gravitational straight and loop heat pipes – Part II: Experimental testing and simulation model validation. Energy Conversion and Management, 2015, 93, 228-238. | 9.2 | 12 |
| 67 | An Approach to Data Acquisition for Urban Building Energy Modeling Using a Gaussian Mixture Model and Expectation-Maximization Algorithm. Buildings, 2021, 11, 30. | 3.1 | 12 |
| 68 | Design of a residential photovoltaic system: the impact of the demand profile and the normative framework. Renewable Energy, 2020, 160, 1458-1467. | 8.9 | 11 |
| 69 | A preliminary techno-economic study of a building integrated photovoltaic (BIPV) system for a residential building cluster in Sweden by the integrated toolkit of BIM and PVSITES. Intelligent Buildings International, 2021, 13, 51-69. | 2.3 | 11 |
| 70 | Investigation of the Peer-to-Peer energy trading performances in a local community under the future climate change scenario in Sweden. Energy Reports, 2022, 8, 989-1001. | 5.1 | 11 |
| 71 | A Technical Review of Modeling Techniques for Urban Solar Mobility: Solar to Buildings, Vehicles, and Storage (S2BVS). Sustainability, 2020, 12, 7035. | 3.2 | 10 |
| 72 | Techno-economic analysis of an exhaust air heat pump system assisted by unglazed transpired solar collectors in a Swedish residential cluster. Solar Energy, 2021, 224, 966-983. | 6.1 | 9 |

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| 73 | Evaluating multiple parameters dependency of base temperature for heating degree-days in building energy prediction. Building Simulation, 2021, 14, 969-985. | 5.6 | 9 |
| 74 | A characteristic study on the start-up performance of molten-salt heat pipes: Experimental investigation. Experimental Thermal and Fluid Science, 2017, 82, 433-438. | 2.7 | 8 |
| 75 | Thermal and Optical Analysis of a Passive Heat Recovery and Storage System for Greenhouse Skin. Procedia Engineering, 2016, 155, 472-478. | 1.2 | 7 |
| 76 | Design Strategy of a Compact Unglazed Solar Thermal Facade (STF) for Building Integration Based on BIM Concept. Energy Procedia, 2017, 105, 1-6. | 1.8 | 7 |
| 77 | Life Cycle Cost of Heat Supply to Areas with Detached Housesâ€"A Comparison of District Heating and Heat Pumps from an Energy System Perspective. Energies, 2018, 11, 3266. | 3.1 | 7 |
| 78 | Holistic electrification vs deep energy retrofits for optimal decarbonisation pathways of UK dwellings: A case study of the 1940sâ€™ British post-war masonry house. Energy, 2022, 241, 122935. | 8.8 | 7 |
| 79 | Conceptual Development of a Compact Unglazed Solar Thermal Facade (STF) for Building Integration. Energy Procedia, 2016, 96, 42-54. | 1.8 | 6 |
| 80 | A Top-Down Digital Mapping of Spatial-Temporal Energy Use for Municipality-Owned Buildings: A Case Study in BorlÃ¤nge, Sweden. Buildings, 2021, 11, 72. | 3.1 | 6 |
| 81 | A GA-based NZEB-cluster planning and design optimization method for mitigating grid overvoltage risk. Energy, 2022, 243, 123051. | 8.8 | 6 |
| 82 | Design, Fabrication and Experimental Study of a Novel Loop-heat-pipe Based Solar Thermal Facade Water Heating System. Energy Procedia, 2015, 75, 566-571. | 1.8 | 5 |
| 83 | Experimental Study of a Compact Unglazed Solar Thermal Facade (STF) for Energy-efficient Buildings. Energy Procedia, 2016, 104, 3-8. | 1.8 | 5 |
| 84 | Optimizing the Configuration of a Compact Thermal Facade Module for Solar Renovation Concept in Buildings. Energy Procedia, 2016, 104, 9-14. | 1.8 | 5 |
| 85 | Digital Mapping of Techno-Economic Performance of a Water-Based Solar Photovoltaic/Thermal (PVT) System for Buildings over Large Geographical Cities. Buildings, 2020, 10, 148. | 3.1 | 5 |
| 86 | Strategies of Design Concepts and Energy Systems for Nearly Zero-Energy Container Buildings (NZECBs) in Different Climates. Buildings, 2021, 11, 364. | 3.1 | 5 |
| 87 | The perception of Swedish housing ownerâ€™s on the strategies to increase the rate of energy efficient refurbishment of multi-family buildings. Intelligent Buildings International, 2020, 12, 153-168. | 2.3 | 4 |
| 88 | The Early Design Stage of a Novel Solar Thermal FaÃ§ade (STF) for Building Integration: Energy Performance Simulation and Socio-Economic Analysis. Energy Procedia, 2016, 96, 55-66. | 1.8 | 3 |
| 89 | Assessment of the Effectiveness of Investment Strategy in Solar Photovoltaic (PV) Energy Sector: A Case Study. Energy Procedia, 2017, 105, 2977-2982. | 1.8 | 2 |
| 90 | Generating hourly electricity demand data for large-scale single-family buildings by a decomposition-recombination method. Energy and Built Environment, 2023, 4, 418-431. | 5.9 | 2 |

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|---|---------|----|-----------|
| 91 | Heat Pump Technologies and Their Applications in Solar Systems. Green Energy and Technology, 2019, , 311-339. | 0.6 | 1 |
| 92 | Reinforcement Learning Methodologies for Controlling Occupant Comfort in Buildings. Sustainable Development Goals Series, 2021, , 179-205. | 0.4 | 1 |
| 93 | Solar Photovoltaic/Thermal Technologies and Their Application in Building Retrofitting. , 2013, , 615-658. | | 1 |
| 94 | Comparative Investigation of Solar Photovoltaic (PV) and Photovoltaic/Thermal (PV/T) Systems by both Laboratory and Field Experiments. , 2016, , 673-682. | | 0 |
| 95 | Solar Systemsâ€™ Economic and Environmental Performance Assessment. Green Energy and Technology, 2019, , 453-486. | 0.6 | 0 |
| 96 | Solar System Design and Energy Performance Assessment Approaches. Green Energy and Technology, 2019, , 417-451. | 0.6 | 0 |
| 97 | Study of a Novel Liquid-Vapour Separator-Incorporated Gravitational Loop Heat Pipe. , 0, , . | | 0 |
| 98 | An economic analysis of the solar photovoltaic/thermal (PV/T) technologies in Sweden: a case study. IOP Conference Series: Materials Science and Engineering, 2019, 556, 012002. | 0.6 | 0 |
| 99 | Building Renovation Adapting to Future Climate: A Potential Solution of Phase-Change Material to Building Envelope. , 2021, , 1-61. | | 0 |
| 100 | Genetic Algorithm and Mont Carlo Method for Global Sensitivity Analysis of Key Parameters Identification of Net Zero Energy Buildings Towards Power Grid Interaction Optimization. Sustainable Development Goals Series, 2021, , 337-358. | 0.4 | 0 |
| 101 | A Prediction Accuracy Weighted Voting Ensemble Method for Thermal Sensation Evaluation. Sustainable Development Goals Series, 2021, , 249-267. | 0.4 | 0 |
| 102 | Genetic Algorithm for Transforming a Residential Building Cluster into Electricity Prosumers. Sustainable Development Goals Series, 2021, , 285-315. | 0.4 | 0 |
| 103 | Prediction of Occupancy Level and Energy Consumption in Office Building Using Blind System Identification and Neural Networks. Sustainable Development Goals Series, 2021, , 47-79. | 0.4 | 0 |
| 104 | Cluster Analysis for Occupant-Behaviour Based Electricity Load Patterns in Buildings: A Case Study in Shanghai Residences. Sustainable Development Goals Series, 2021, , 81-92. | 0.4 | 0 |
| 105 | Local Energy Communities: Market Design Evaluation Using Agent Based Modelling. Sustainable Development Goals Series, 2021, , 359-386. | 0.4 | 0 |
| 106 | A Novel Reinforcement Learning Method for Improving Occupant Comfort via Window Opening and Closing. Sustainable Development Goals Series, 2021, , 207-226. | 0.4 | 0 |
| 107 | The Evolving of Data-Driven Analytics for Buildings and Cities Towards Sustainability. Sustainable Development Goals Series, 2021, , 1-7. | 0.4 | 0 |
| 108 | Digital Mapping of Techno-Economic Performance of a Water-Based Solar Photovoltaic/thermal (PVT) System for Buildings Over Large Geographical Cities. Sustainable Development Goals Series, 2021, , 423-450. | 0.4 | 0 |

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|---|---------|----|-----------|
| 109 | Building Renovation Adapting to Future Climate: A Potential Solution of Phase Change Material to Building Envelope. , 2022, , 2925-2984. | | 0 |