# Kristen S Cetin

List of Publications by Year
in descending order



| | | | |
|---|---|---|---|
| 64 papers | 1,210 citations | 331259 21 h-index | 395343 33 g-index |
| 64 all docs | 64 docs citations | 64 times ranked | 1091 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Modeling urban building energy use: A review of modeling approaches and procedures. Energy, 2017, 141, 2445-2457. | 4.5 | 185 |
| 2 | Freeze-thaw performance of phase change material (PCM) incorporated pavement subgrade soil. Construction and Building Materials, 2019, 202, 449-464. | 3.2 | 77 |
| 3 | Appliance daily energy use in new residential buildings: Use profiles and variation in time-of-use. Energy and Buildings, 2014, 84, 716-726. | 3.1 | 63 |
| 4 | Development and validation of an HVAC on/off controller in EnergyPlus for energy simulation of residential and small commercial buildings. Energy and Buildings, 2019, 183, 467-483. | 3.1 | 63 |
| 5 | Typical occupancy profiles and behaviors in residential buildings in the United States. Energy and Buildings, 2020, 210, 109713. | 3.1 | 46 |
| 6 | Single and multi-family residential central all-air HVAC system operational characteristics in cooling-dominated climate. Energy and Buildings, 2015, 96, 210-220. | 3.1 | 42 |
| 7 | Energy savings and daylighting evaluation of dynamic venetian blinds and lighting through full-scale experimental testing. Energy, 2020, 197, 117190. | 4.5 | 40 |
| 8 | Evaluation of the causes and impact of outliers on residential building energy use prediction using inverse modeling. Building and Environment, 2018, 138, 194-206. | 3.0 | 37 |
| 9 | Development and analysis of residential change-point models from smart meter data. Energy and Buildings, 2017, 139, 351-359. | 3.1 | 34 |
| 10 | Impacts of COVID-19 on residential building energy use and performance. Building and Environment, 2021, 205, 108200. | 3.0 | 34 |
| 11 | Energy efficiency in U.S. residential rental housing: Adoption rates and impact on rent. Applied Energy, 2017, 205, 1021-1033. | 5.1 | 32 |
| 12 | Design and Full-scale Implementation of the Largest Operational Electrically Conductive Concrete Heated Pavement System. Construction and Building Materials, 2020, 255, 119229. | 3.2 | 31 |
| 13 | Parametric study of the progressive freeze concentration for desalination. Desalination, 2021, 510, 115077. | 4.0 | 30 |
| 14 | Effect of technology-enabled time-of-use energy pricing on thermal comfort and energy use in mechanically-conditioned residential buildings in cooling dominated climates. Building and Environment, 2016, 96, 118-130. | 3.0 | 28 |
| 15 | Smart Meters and Smart Devices in Buildings: a Review of Recent Progress and Influence on Electricity Use and Peak Demand. Current Sustainable/Renewable Energy Reports, 2017, 4, 1-7. | 1.2 | 28 |
| 16 | Developing a landscape of urban building energy use with improved spatiotemporal representations in a cool-humid climate. Building and Environment, 2018, 136, 107-117. | 3.0 | 27 |
| 17 | Towards resilient infrastructure systems for winter weather events: Integrated stochastic economic evaluation of electrically conductive heated airfield pavements. Sustainable Cities and Society, 2018, 41, 195-204. | 5.1 | 27 |
| 18 | City-scale single family residential building energy consumption prediction using genetic algorithm-based Numerical Moment Matching technique. Building and Environment, 2020, 172, 106667. | 3.0 | 27 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Full-scale experimental testing of integrated dynamically-operated roller shades and lighting in perimeter office spaces. Solar Energy, 2019, 186, 17-28. | 2.9 | 26 |
| 20 | Energy and thermal performance evaluation of an automated snow and ice removal system at airports using numerical modeling and field measurements. Sustainable Cities and Society, 2018, 43, 238-250. | 5.1 | 25 |
| 21 | An assessment of opinions and perceptions of smart thermostats using aspect-based sentiment analysis of online reviews. Building and Environment, 2020, 170, 106603. | 3.0 | 25 |
| 22 | Cluster analysis of occupancy schedules in residential buildings in the United States. Energy and Buildings, 2021, 236, 110791. | 3.1 | 22 |
| 23 | Characterizing large residential appliance peak load reduction potential utilizing a probabilistic approach. Science and Technology for the Built Environment, 2016, 22, 720-732. | 0.8 | 19 |
| 24 | Residential Building Energy Consumption: a Review of Energy Data Availability, Characteristics, and Energy Performance Prediction Methods. Current Sustainable/Renewable Energy Reports, 2018, 5, 76-85. | 1.2 | 19 |
| 25 | Experimental and theoretical characterization of electrodes on electrical and thermal performance of electrically conductive concrete. Composites Part B: Engineering, 2021, 222, 109003. | 5.9 | 19 |
| 26 | Design and Construction of the Worldâ€™s First Full-Scale Electrically Conductive Concrete Heated Airport Pavement System at a U.S. Airport. Transportation Research Record, 2018, 2672, 82-94. | 1.0 | 18 |
| 27 | On the long-term density prediction of peak electricity load with demand side management in buildings. Energy and Buildings, 2020, 228, 110450. | 3.1 | 18 |
| 28 | Data-Driven Methodology for Energy and Peak Load Reduction of Residential HVAC Systems. Procedia Engineering, 2016, 145, 852-859. | 1.2 | 17 |
| 29 | Data-Driven Evaluation of Residential HVAC System Efficiency Using Energy and Environmental Data. Energies, 2019, 12, 188. | 1.6 | 17 |
| 30 | Calibration of energy simulation using optimization for buildings with dynamic shading systems. Energy and Buildings, 2021, 236, 110787. | 3.1 | 16 |
| 31 | Thermal comfort evaluation for mechanically conditioned buildings using response surfaces in an uncertainty analysis framework. Science and Technology for the Built Environment, 2016, 22, 140-152. | 0.8 | 12 |
| 32 | Dynamic Shading in Buildings: a Review of Testing Methods and Recent Research Findings. Current Sustainable/Renewable Energy Reports, 2018, 5, 93-100. | 1.2 | 12 |
| 33 | Extreme events, energy security and equality through micro- and macro-levels: Concepts, challenges and methods. Energy Research and Social Science, 2022, 85, 102401. | 3.0 | 10 |
| 34 | Integrated stochastic life cycle benefit cost analysis of hydronically-heated apron pavement system. Journal of Cleaner Production, 2019, 224, 994-1003. | 4.6 | 9 |
| 35 | Development of Prediction Models for Mechanical Properties and Durability of Concrete Using Combined Nondestructive Tests. Journal of Materials in Civil Engineering, 2019, 31, 04018378. | 1.3 | 9 |
| 36 | Energy-efficient design of a carbon fiber-based self-heating concrete pavement system through finite element analysis. Clean Technologies and Environmental Policy, 2020, 22, 1145-1155. | 2.1 | 8 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Configuration of Electrodes for Electrically Conductive Concrete Heated Pavement Systems. , 2017, , . | | 7 |
| 38 | Stabilization and concentration of nitrogen in synthetic urine with peracetic acid and progressive freeze concentration. Journal of Environmental Chemical Engineering, 2022, 10, 107768. | 3.3 | 7 |
| 39 | Influential variables impacting the reliability of building occupancy sensor systems: A systematic review and expert survey. Science and Technology for the Built Environment, 2022, 28, 200-220. | 0.8 | 5 |
| 40 | Stochastic residential occupancy schedules based on the American Time-Use Survey. Science and Technology for the Built Environment, 2022, 28, 776-790. | 0.8 | 5 |
| 41 | Projecting the Most Likely Annual Urban Heat Extremes in the Central United States. Atmosphere, 2019, 10, 727. | 1.0 | 4 |
| 42 | Variation in residential occupancy profiles in the United States by household income level and characteristics. Journal of Building Performance Simulation, 2021, 14, 692-711. | 1.0 | 4 |
| 43 | Hydronic Heated Pavement System Using Precast Concrete Pavement for Airport Applications. , 2018, , . | | 3 |
| 44 | Surrogate modeling approach towards coupling computational fluid dynamics and energy simulations for analysis and design of energy efficient attics. Building and Environment, 2019, 149, 196-209. | 3.0 | 3 |
| 45 | Energy savings and retrofit assessment for city-scale residential building stock during extreme heatwave events using genetic algorithm-numerical moment matching. Clean Technologies and Environmental Policy, 2022, 24, 2081-2098. | 2.1 | 3 |
| 46 | Development and testing of a performance evaluation methodology to assess the reliability of occupancy sensor systems in residential buildings. Energy and Buildings, 2022, 268, 112148. | 3.1 | 3 |
| 47 | Improvement of inverse change-point modeling of electricity consumption in residential buildings across multiple climate zones. Building Simulation, 2019, 12, 711-722. | 3.0 | 2 |
| 48 | Proposed Improvements to the Construction of Electrically Conductive Concrete Pavement System Based on Lessons Learned. , 2020, , . | | 2 |
| 49 | Smart Thermostats in Rental Housing Units: Perspectives from Landlords and Tenants. Journal of Architectural Engineering, 2021, 27, . | 0.8 | 2 |
| 50 | Mixed-Mode Ventilation in HVAC System for Energy and Economic Benefits in Residential Buildings. Energies, 2022, 15, 4429. | 1.6 | 2 |
| 51 | Numerical Modeling of Electrically Conductive Pavement Systems. , 2017, , . | | 1 |
| 52 | Predicting the Need for Energy Efficiency Upgrades of Residential Buildings through Data-Driven Modeling. , 2018, , . | | 1 |
| 53 | Construction Techniques for Electrically Conductive Heated Pavement Systems. , 2018, , . | | 1 |
| 54 | Daylighting and Visual Comfort Performance of Integrated Dynamic Roller Shades and Lighting Controls. , 2019, , . | | 1 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Investigating Problem-Solving Processes of Students, Faculty, and Practicing Engineers in Civil Engineering. Journal of Civil Engineering Education, 2022, 148, . | 0.8 | 1 |
| 56 | Energy and Demand Saving Potential due to Integrated HVAC, Lighting, and Shading Controls in Small Office Building. , 2022, , . | | 1 |
| 57 | Data-Driven Method to Study the Impact of Utilizing Electric Ground Power Systems on Airport Electricity Demand Profile. Transportation Research Record, 2020, 2674, 261-271. | 1.0 | 0 |
| 58 | Impact of Demand Response on Flexibility Services and Transmission Investment. , 2021, , . | | 0 |
| 59 | Predicting Soil Temperature and Moisture beneath Granular-Surfaced Roadways Using Regional Weather Data Network. , 2021, , . | | 0 |
| 60 | A growth curve-based Bayesian hierarchical model for multi-building energy use data analysis. Building and Environment, 2021, 206, 108349. | 3.0 | 0 |
| 61 | Monitoring and Modeling of Soil Thermal and Hydraulic Behavior Beneath a Granular-Surfaced Roadway. Lecture Notes in Civil Engineering, 2022, , 877-888. | 0.3 | 0 |
| 62 | Measurement and Verification and Model Validation to Evaluate Energy and Demand Savings from Smart Building Technologies in a Residential, Controlled Laboratory. , 2022, , . | | 0 |
| 63 | Homeownersâ€™ Motivations to Invest in Energy-Efficient Technologies in Residential Buildings of Rural Midwest America. , 2022, , . | | 0 |
| 64 | Characterizing Residential Energy Consumption Patterns in the Rural Midwest. , 2022, , . | | 0 |