

# Taehoon Hong

## List of Publications by Year in descending order

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227  
papers

6,811  
citations

57758  
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all docs

230  
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times ranked

4440  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | A systematic review of the smart energy conservation system: From smart homes to sustainable smart cities. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 140, 110755.  | 16.4 | 168       |
| 2  | A review on sustainable construction management strategies for monitoring, diagnosing, and retrofitting the building's dynamic energy performance: Focused on the operation and maintenance phase. <i>Applied Energy</i> , 2015, 155, 671-707. | 10.1 | 140       |
| 3  | Effect of project characteristics on project performance in construction projects based on structural equation model. <i>Expert Systems With Applications</i> , 2009, 36, 10461-10470.   | 7.6  | 138       |
| 4  | Development of a method for estimating the rooftop solar photovoltaic (PV) potential by analyzing the available rooftop area using Hillshade analysis. <i>Applied Energy</i> , 2017, 194, 320-332.   | 10.1 | 127       |
| 5  | A GIS (geographic information system)-based optimization model for estimating the electricity generation of the rooftop PV (photovoltaic) system. <i>Energy</i> , 2014, 65, 190-199.   | 8.8  | 102       |
| 6  | LCC and LCCO2 analysis of green roofs in elementary schools with energy saving measures. <i>Energy and Buildings</i> , 2012, 45, 229-239.  | 6.7  | 100       |
| 7  | Analysis of South Korea's economic growth, carbon dioxide emission, and energy consumption using the Markov switching model. <i>Renewable and Sustainable Energy Reviews</i> , 2013, 18, 543-551.  | 16.4 | 96        |
| 8  | A CBR-based hybrid model for predicting a construction duration and cost based on project characteristics in multi-family housing projects. <i>Canadian Journal of Civil Engineering</i> , 2010, 37, 739-752.                                  | 1.3  | 93        |
| 9  | Development of a new energy benchmark for improving the operational rating system of office buildings using various data-mining techniques. <i>Applied Energy</i> , 2016, 173, 225-237.  | 10.1 | 92        |
| 10 | An optimization model for selecting the optimal green systems by considering the thermal comfort and energy consumption. <i>Applied Energy</i> , 2016, 169, 682-695.   | 10.1 | 85        |
| 11 | Determining the Peer-to-Peer electricity trading price and strategy for energy prosumers and consumers within a microgrid. <i>Applied Energy</i> , 2020, 261, 114335.  | 10.1 | 85        |
| 12 | Changes in energy consumption according to building use type under COVID-19 pandemic in South Korea. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 148, 111294.  | 16.4 | 82        |
| 13 | Assessment Model for Energy Consumption and Greenhouse Gas Emissions during Building Construction. <i>Journal of Management in Engineering - ASCE</i> , 2014, 30, 226-235.   | 4.8  | 78        |
| 14 | Development of a new energy efficiency rating system for existing residential buildings. <i>Energy Policy</i> , 2014, 68, 218-231.   | 8.8  | 78        |
| 15 | Economic and Environmental Evaluation Model for Selecting the Optimum Design of Green Roof Systems in Elementary Schools. <i>Environmental Science &amp; Technology</i> , 2012, 46, 8475-8483.   | 10.0 | 76        |
| 16 | An estimation model for determining the annual energy cost budget in educational facilities using SARIMA (seasonal autoregressive integrated moving average) and ANN (artificial neural network). <i>Energy</i> , 2014, 71, 71-79.             | 8.8  | 75        |
| 17 | A decision support model for reducing electric energy consumption in elementary school facilities. <i>Applied Energy</i> , 2012, 95, 253-266.  | 10.1 | 74        |
| 18 | An estimation model for the heating and cooling demand of a residential building with a different envelope design using the finite element method. <i>Applied Energy</i> , 2014, 115, 205-215.   | 10.1 | 73        |

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|----|---|------|-----------|
| 19 | Cost and CO2 Emission Optimization of Steel Reinforced Concrete Columns in High-Rise Buildings. Energies, 2013, 6, 5609-5624.   | 3.1  | 72        |
| 20 | Framework for the analysis of the potential of the rooftop photovoltaic system to achieve the net-zero energy solar buildings. Progress in Photovoltaics: Research and Applications, 2014, 22, 462-478. | 8.1  | 67        |
| 21 | Hybrid LCA model for assessing the embodied environmental impacts of buildings in South Korea. Environmental Impact Assessment Review, 2015, 50, 143-155.   | 9.2  | 66        |
| 22 | An economic and environmental assessment for selecting the optimum new renewable energy system for educational facility. Renewable and Sustainable Energy Reviews, 2014, 29, 286-300.                   | 16.4 | 65        |
| 23 | An integrated multi-objective optimization model for determining the optimal solution in implementing the rooftop photovoltaic system. Renewable and Sustainable Energy Reviews, 2016, 57, 822-837.     | 16.4 | 65        |
| 24 | Comparative analysis of decision-making methods for integrating cost and CO2 emission – focus on building structural design –. Energy and Buildings, 2014, 72, 186-194.                                 | 6.7  | 64        |
| 25 | Development of a CO2 emission benchmark for achieving the national CO2 emission reduction target by 2030. Energy and Buildings, 2018, 158, 86-94.   | 6.7  | 64        |
| 26 | Estimation of the Monthly Average Daily Solar Radiation using Geographic Information System and Advanced Case-Based Reasoning. Environmental Science & Technology, 2013, 47, 4829-4839.                 | 10.0 | 63        |
| 27 | The development of a construction cost prediction model with improved prediction capacity using the advanced CBR approach. Expert Systems With Applications, 2011, 38, 8597-8606.                       | 7.6  | 62        |
| 28 | Integrated model for assessing the cost and CO2 emission (IMACC) for sustainable structural design in ready-mix concrete. Journal of Environmental Management, 2012, 103, 1-8.                          | 7.8  | 62        |
| 29 | An integrated evaluation of productivity, cost and CO2 emission between prefabricated and conventional columns. Journal of Cleaner Production, 2017, 142, 2393-2406.                                    | 9.3  | 61        |
| 30 | Development of the smart photovoltaic system blind and its impact on net-zero energy solar buildings using technical-economic-political analyses. Energy, 2017, 124, 382-396.                           | 8.8  | 59        |
| 31 | A decision support model for improving a multi-family housing complex based on CO2 emission from gas energy consumption. Building and Environment, 2012, 52, 142-151.                                   | 6.9  | 56        |
| 32 | AN INTEGRATED MULTI-OBJECTIVE OPTIMIZATION MODEL FOR SOLVING THE CONSTRUCTION TIME-COST TRADE-OFF PROBLEM. Journal of Civil Engineering and Management, 2015, 21, 323-333.                              | 3.5  | 55        |
| 33 | A multi-objective optimization model for determining the building design and occupant behaviors based on energy, economic, and environmental performance. Energy, 2019, 174, 823-834.                   | 8.8  | 55        |
| 34 | A bottom-up approach for estimating the economic potential of the rooftop solar photovoltaic system considering the spatial and temporal diversity. Applied Energy, 2018, 232, 640-656.                 | 10.1 | 54        |
| 35 | An optimized gene expression programming model for forecasting the national CO2 emissions in 2030 using the metaheuristic algorithms. Applied Energy, 2018, 228, 808-820.                               | 10.1 | 54        |
| 36 | Occupant responses on satisfaction with window size in physical and virtual built environments. Building and Environment, 2019, 166, 106409.  | 6.9  | 54        |

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|----|--|------|-----------|
| 37 | A psychophysiological effect of indoor thermal condition on college students's learning performance through EEG measurement. Building and Environment, 2020, 184, 107223.                              | 6.9  | 54        |
| 38 | Impact of different LEED versions for green building certification and energy efficiency rating system: A Multifamily Midrise case study. Applied Energy, 2017, 205, 732-740.                          | 10.1 | 53        |
| 39 | Framework for the Mapping of the Monthly Average Daily Solar Radiation Using an Advanced Case-Based Reasoning and a Geostatistical Technique. Environmental Science & Technology, 2014, 48, 4604-4612. | 10.0 | 50        |
| 40 | Establishment of an optimal occupant behavior considering the energy consumption and indoor environmental quality by region. Applied Energy, 2017, 204, 1431-1443.                                     | 10.1 | 50        |
| 41 | Psychological and physiological effects of a green wall on occupants: A cross-over study in virtual reality. Building and Environment, 2021, 204, 108134.  | 6.9  | 48        |
| 42 | Framework for the implementation of a new renewable energy system in an educational facility. Applied Energy, 2013, 103, 539-551.  | 10.1 | 47        |
| 43 | Determining the optimal window size of office buildings considering the workers' task performance and the building's energy consumption. Building and Environment, 2020, 177, 106872.                  | 6.9  | 47        |
| 44 | Energy-Saving Techniques for Reducing CO2 Emissions in Elementary Schools. Journal of Management in Engineering - ASCE, 2012, 28, 39-50.   | 4.8  | 46        |
| 45 | Decision support model for establishing the optimal energy retrofit strategy for existing multi-family housing complexes. Energy Policy, 2014, 66, 157-169.  | 8.8  | 46        |
| 46 | Methodology for assessing human health impacts due to pollutants emitted from building materials. Building and Environment, 2016, 95, 133-144.   | 6.9  | 45        |
| 47 | How to better share energy towards a carbon-neutral city? A review on application strategies of battery energy storage system in city. Renewable and Sustainable Energy Reviews, 2022, 157, 112113.    | 16.4 | 44        |
| 48 | Benchmarks as a tool for free allocation through comparison with similar projects: Focused on multi-family housing complex. Applied Energy, 2014, 114, 663-675.  | 10.1 | 42        |
| 49 | Automatic calibration model of a building energy simulation using optimization algorithm. Energy Procedia, 2017, 105, 3698-3704.   | 1.8  | 42        |
| 50 | An integrated psychological response score of the occupants based on their activities and the indoor environmental quality condition changes. Building and Environment, 2017, 123, 66-77.              | 6.9  | 42        |
| 51 | Health risk assessment for occupants as a decision-making tool to quantify the environmental effects of particulate matter in construction projects. Building and Environment, 2019, 161, 106267.      | 6.9  | 42        |
| 52 | Maintenance management process for reducing CO2 emission in shopping mall complexes. Energy and Buildings, 2011, 43, 894-904.  | 6.7  | 41        |
| 53 | A decision support model for improving a multi-family housing complex based on CO2 emission from electricity consumption. Journal of Environmental Management, 2012, 112, 67-78.                       | 7.8  | 40        |
| 54 | A model for predicting the environmental impacts of educational facilities in the project planning phase. Journal of Cleaner Production, 2015, 107, 538-549.   | 9.3  | 40        |

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|----|--|------|-----------|
| 55 | An integrated multi-objective optimization model for establishing the low-carbon scenario 2020 to achieve the national carbon emissions reduction target for residential buildings. Renewable and Sustainable Energy Reviews, 2015, 49, 410-425. | 16.4 | 39        |
| 56 | Automatic ventilation control algorithm considering the indoor environmental quality factors and occupant ventilation behavior using a logistic regression model. Building and Environment, 2019, 153, 46-59.                                    | 6.9  | 39        |
| 57 | Effect of Delivery Methods on Design Performance in Multifamily Housing Projects. Journal of Construction Engineering and Management - ASCE, 2008, 134, 468-482.   | 3.8  | 38        |
| 58 | Development of an evaluation process for green and non-green buildings focused on energy performance of G-SEED and LEED. Building and Environment, 2016, 105, 172-184.   | 6.9  | 38        |
| 59 | An economic impact analysis of state solar incentives for improving financial performance of residential solar photovoltaic systems in the United States. Renewable and Sustainable Energy Reviews, 2016, 58, 590-607.                           | 16.4 | 38        |
| 60 | Hybrid agent-based modeling of rooftop solar photovoltaic adoption by integrating the geographic information system and data mining technique. Energy Conversion and Management, 2019, 183, 266-279.   | 9.2  | 38        |
| 61 | A STUDY ON THE DEVELOPMENT OF A COST MODEL BASED ON THE OWNER'S DECISION MAKING AT THE EARLY STAGES OF A CONSTRUCTION PROJECT. International Journal of Strategic Property Management, 2010, 14, 121-137.  | 1.8  | 37        |
| 62 | Evaluation of the influence of design factors on the CO2 emissions and costs of reinforced concrete columns. Energy and Buildings, 2014, 82, 378-384.  | 6.7  | 37        |
| 63 | Development of a dynamic operational rating system in energy performance certificates for existing buildings: Geostatistical approach and data-mining technique. Applied Energy, 2015, 154, 254-270.   | 10.1 | 37        |
| 64 | Spatial perception of ceiling height and type variation in immersive virtual environments. Building and Environment, 2019, 163, 106285.  | 6.9  | 37        |
| 65 | A novel operation approach for the energy efficiency improvement of the HVAC system in office spaces through real-time big data analytics. Renewable and Sustainable Energy Reviews, 2020, 127, 109885.  | 16.4 | 37        |
| 66 | CBR Revision Model for Improving Cost Prediction Accuracy in Multifamily Housing Projects. Journal of Management in Engineering - ASCE, 2010, 26, 229-236.   | 4.8  | 35        |
| 67 | Establishing environmental benchmarks to determine the environmental performance of elementary school buildings using LCA. Energy and Buildings, 2016, 127, 818-829.   | 6.7  | 35        |
| 68 | Optimal planning of a rooftop PV system using GIS-based reinforcement learning. Applied Energy, 2021, 298, 117239.   | 10.1 | 35        |
| 69 | Assessment of Seasonal Energy Efficiency Strategies of a Double Skin Façade in a Monsoon Climate Region. Energies, 2013, 6, 4352-4376.   | 3.1  | 34        |
| 70 | Quantitative health impact assessment of construction noise exposure on the nearby region for noise barrier optimization. Building and Environment, 2020, 176, 106869.   | 6.9  | 34        |
| 71 | Framework for establishing the optimal implementation strategy of a fuel-cell-based combined heat and power system: Focused on multi-family housing complex. Applied Energy, 2014, 127, 11-24.   | 10.1 | 33        |
| 72 | Life cycle economic and environmental assessment for establishing the optimal implementation strategy of rooftop photovoltaic system in military facility. Journal of Cleaner Production, 2015, 104, 315-327.                                    | 9.3  | 33        |

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|----|--|------|-----------|
| 73 | Nonlinearity analysis of the shading effect on the technicalâ€‘economic performance of the building-integrated photovoltaic blind. Applied Energy, 2017, 194, 467-480.                                       | 10.1 | 33        |
| 74 | Techno-economic performance analysis of the smart solar photovoltaic blinds considering the photovoltaic panel type and the solar tracking method. Energy and Buildings, 2019, 193, 1-14.                    | 6.7  | 33        |
| 75 | Building occupants' psycho-physiological response to indoor climate and CO2 concentration changes in office buildings. Building and Environment, 2020, 169, 106596.  | 6.9  | 33        |
| 76 | Production prediction of conventional and global positioning systemâ€‘based earthmoving systems using simulation and multiple regression analysis. Canadian Journal of Civil Engineering, 2008, 35, 574-587. | 1.3  | 32        |
| 77 | Development of an integrated energy benchmark for a multi-family housing complex using district heating. Applied Energy, 2016, 179, 1048-1061.   | 10.1 | 32        |
| 78 | Development of a prediction model for the cost saving potentials in implementing the building energy efficiency rating certification. Applied Energy, 2017, 189, 257-270.                                    | 10.1 | 32        |
| 79 | Selection Model for Delivery Methods for Multifamily-Housing Construction Projects. Journal of Management in Engineering - ASCE, 2011, 27, 106-115.  | 4.8  | 31        |
| 80 | A finite element model for estimating the techno-economic performance of the building-integrated photovoltaic blind. Applied Energy, 2016, 179, 211-227.   | 10.1 | 31        |
| 81 | Analyzing the real-time indoor environmental quality factors considering the influence of the building occupantsâ€™ behaviors and the ventilation. Building and Environment, 2019, 156, 99-109.              | 6.9  | 31        |
| 82 | An empirical analysis of environmental pollutants on building construction sites for determining the real-time monitoring indices. Building and Environment, 2020, 170, 106636.                              | 6.9  | 31        |
| 83 | Development of a real-time automated monitoring system for managing the hazardous environmental pollutants at the construction site. Journal of Hazardous Materials, 2021, 402, 123483.                      | 12.4 | 31        |
| 84 | Occupant-centered real-time control of indoor temperature using deep learning algorithms. Building and Environment, 2022, 208, 108633.   | 6.9  | 31        |
| 85 | Determining the Value of Governmental Subsidies for the Installation of Clean Energy Systems Using Real Options. Journal of Construction Engineering and Management - ASCE, 2012, 138, 422-430.              | 3.8  | 30        |
| 86 | A novel real-time method for HVAC system operation to improve indoor environmental quality in meeting rooms. Building and Environment, 2018, 144, 365-385.   | 6.9  | 30        |
| 87 | Development of a prototype for multi-function smart window by integrating photovoltaic blinds and ventilation system. Building and Environment, 2019, 149, 366-378.  | 6.9  | 30        |
| 88 | An integrated psychological score for occupants based on their perception and emotional response according to the windowsâ€™ outdoor view size. Building and Environment, 2020, 180, 107019.                 | 6.9  | 30        |
| 89 | Construction, Inspection, and Maintenance of FRP Deck Panels. Journal of Composites for Construction, 2006, 10, 561-572.   | 3.2  | 29        |
| 90 | Simulation study on construction process of FRP bridge deck panels. Automation in Construction, 2007, 16, 620-631.   | 9.8  | 29        |

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|-----|---|------|-----------|
| 91  | Simulation-based determination of optimal life-cycle cost for FRP bridge deck panels. Automation in Construction, 2007, 16, 140-152.  | 9.8  | 29        |
| 92  | Integrated CO2, cost, and schedule management system for building construction projects using the earned value management theory. Journal of Cleaner Production, 2015, 103, 275-285.                  | 9.3  | 29        |
| 93  | Advanced Strategies for Net-Zero Energy Building: Focused on the Early Phase and Usage Phase of a Building's Life Cycle. Sustainability, 2017, 9, 2272.   | 3.2  | 29        |
| 94  | Simulation-Based Schedule Estimation Model for ACS-Based Core Wall Construction of High-Rise Building. Journal of Construction Engineering and Management - ASCE, 2011, 137, 393-402.                 | 3.8  | 28        |
| 95  | A program-level management system for the life cycle environmental and economic assessment of complex building projects. Environmental Impact Assessment Review, 2015, 54, 9-21.                      | 9.2  | 28        |
| 96  | A Framework for Reducing Dust Emissions and Energy Consumption on Construction Sites.. Energy Procedia, 2019, 158, 5092-5096.   | 1.8  | 28        |
| 97  | Partnering Process Model for Public-Sector Fast-Track Design-Build Projects in Korea. Journal of Management in Engineering - ASCE, 2010, 26, 19-29.   | 4.8  | 27        |
| 98  | Framework for the analysis of the low-carbon scenario 2020 to achieve the national carbon Emissions reduction target: Focused on educational facilities. Energy Policy, 2014, 73, 356-367.            | 8.8  | 27        |
| 99  | Estimation of the Available Rooftop Area for Installing the Rooftop Solar Photovoltaic (PV) System by Analyzing the Building Shadow Using Hillshade Analysis. Energy Procedia, 2016, 88, 408-413.     | 1.8  | 27        |
| 100 | A Preliminary Study on the 2-axis Hybrid Solar Tracking Method for the Smart Photovoltaic Blind. Energy Procedia, 2016, 88, 484-490.  | 1.8  | 27        |
| 101 | Revised Case-Based Reasoning Model Development Based on Multiple Regression Analysis for Railroad Bridge Construction. Journal of Construction Engineering and Management - ASCE, 2012, 138, 154-162. | 3.8  | 26        |
| 102 | An estimation methodology for the dynamic operational rating of a new residential building using the advanced case-based reasoning and stochastic approaches. Applied Energy, 2015, 150, 308-322.     | 10.1 | 26        |
| 103 | Physiological response of building occupants based on their activity and the indoor environmental quality condition changes. Building and Environment, 2018, 145, 96-103.                             | 6.9  | 26        |
| 104 | BIM-based preliminary estimation method considering the life cycle cost for decision-making in the early design phase. Journal of Asian Architecture and Building Engineering, 2020, 19, 384-399.     | 2.0  | 26        |
| 105 | Model for Analysis of Factors Affecting Construction Schedule in Highway Work Zones. Journal of Transportation Engineering, 2006, 132, 508-517.   | 0.9  | 25        |
| 106 | CBR-based cost prediction model-II of the design phase for multi-family housing projects. Expert Systems With Applications, 2011, 38, 2797-2808.  | 7.6  | 25        |
| 107 | Prediction Model of CO2 Emission for Residential Buildings in South Korea. Journal of Management in Engineering - ASCE, 2014, 30, .   | 4.8  | 25        |
| 108 | Determining the optimal occupancy density for reducing the energy consumption of public office buildings: A statistical approach. Building and Environment, 2018, 127, 173-186.                       | 6.9  | 25        |



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| 109 | Integrated task performance score for the building occupants based on the CO2 concentration and indoor climate factors changes. Applied Energy, 2018, 228, 1707-1713.  | 10.1 | 25        |
| 110 | Development of a multi-objective optimization model for determining the optimal CO2 emissions reduction strategies for a multi-family housing complex. Renewable and Sustainable Energy Reviews, 2019, 110, 118-131. | 16.4 | 25        |
| 111 | Oversampling-based prediction of environmental complaints related to construction projects with imbalanced empirical-data learning. Renewable and Sustainable Energy Reviews, 2020, 134, 110402.                     | 16.4 | 25        |
| 112 | A dynamic energy performance curve for evaluating the historical trends in the energy performance of existing buildings using a simplified case-based reasoning approach. Energy and Buildings, 2015, 92, 338-350.   | 6.7  | 24        |
| 113 | An optimal scheduling model of an energy storage system with a photovoltaic system in residential buildings considering the economic and environmental aspects. Energy and Buildings, 2020, 209, 109701.             | 6.7  | 24        |
| 114 | A model for evaluating the environmental benefits of elementary school facilities. Journal of Environmental Management, 2014, 132, 220-229.  | 7.8  | 23        |
| 115 | An integrated multi-objective optimization model for determining the optimal solution in the solar thermal energy system. Energy, 2016, 102, 416-426.  | 8.8  | 23        |
| 116 | Comparative analysis of methods for integrating various environmental impacts as a single index in life cycle assessment. Environmental Impact Assessment Review, 2016, 57, 123-133.                                 | 9.2  | 23        |
| 117 | Model for Evaluating the Financial Viability of the BOT Project for Highway Service Areas in South Korea. Journal of Management in Engineering - ASCE, 2016, 32, 04015036.   | 4.8  | 23        |
| 118 | Technical performance analysis of the smart solar photovoltaic blinds based on the solar tracking methods considering the climate factors. Energy and Buildings, 2019, 190, 34-48.                                   | 6.7  | 23        |
| 119 | Determining the optimal set-point temperature considering both labor productivity and energy saving in an office building. Applied Energy, 2020, 276, 115429.  | 10.1 | 23        |
| 120 | Simulation analysis of productivity variation by global positioning system (GPS) implementation in earthmoving operations. Canadian Journal of Civil Engineering, 2006, 33, 1105-1114.                               | 1.3  | 22        |
| 121 | Life-Cycle Cost Analysis on Glass Type of High-Rise Buildings for Increasing Energy Efficiency and Reducing CO2 Emissions in Korea. Journal of Construction Engineering and Management - ASCE, 2012, 138, 897-904.   | 3.8  | 22        |
| 122 | Multi-criteria analysis of a self-consumption strategy for building sectors focused on ground source heat pump systems. Journal of Cleaner Production, 2018, 186, 68-80.   | 9.3  | 22        |
| 123 | Feasibility Analysis of COVID-19 Response Guidelines at Construction Sites in South Korea Using CYCLONE in Terms of Cost and Time. Journal of Management in Engineering - ASCE, 2021, 37, .                          | 4.8  | 22        |
| 124 | Prediction of Environmental Costs of Construction Noise and Vibration at the Preconstruction Phase. Journal of Management in Engineering - ASCE, 2015, 31, .   | 4.8  | 21        |
| 125 | An economic impact analysis of residential progressive electricity tariffs in implementing the building-integrated photovoltaic blind using an advanced finite element model. Applied Energy, 2017, 202, 259-274.    | 10.1 | 21        |
| 126 | Development of a rooftop solar photovoltaic rating system considering the technical and economic suitability criteria at the building level. Energy, 2018, 160, 213-224.   | 8.8  | 21        |



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|-----|--|------|-----------|
| 127 | Development of building driven-energy payback time for energy transition of building with renewable energy systems. Applied Energy, 2020, 271, 115162.   | 10.1 | 21        |
| 128 | A BREAK-EVEN ANALYSIS AND IMPACT ANALYSIS OF RESIDENTIAL SOLAR PHOTOVOLTAIC SYSTEMS CONSIDERING STATE SOLAR INCENTIVES. Technological and Economic Development of Economy, 2018, 24, 358-382.  | 4.6  | 20        |
| 129 | Development of the business feasibility evaluation model for a profitable P2P electricity trading by estimating the optimal trading price. Journal of Cleaner Production, 2021, 295, 126138.   | 9.3  | 20        |
| 130 | A mixed (continuous + discrete) time-cost trade-off model considering four different relationships with lag time. KSCE Journal of Civil Engineering, 2013, 17, 281-291.  | 1.9  | 19        |
| 131 | A Lagrangian finite element model for estimating the heating and cooling demand of a residential building with a different envelope design. Applied Energy, 2015, 142, 66-79.  | 10.1 | 19        |
| 132 | Blockchain-based IoT system for personalized indoor temperature control. Automation in Construction, 2022, 140, 104339.  | 9.8  | 19        |
| 133 | Integrated Schedule and Cost Model for Repetitive Construction Process. Journal of Management in Engineering - ASCE, 2010, 26, 78-88.  | 4.8  | 18        |
| 134 | An Economic and Environmental Assessment Model for Selecting the Optimal Implementation Strategy of Fuel Cell Systems—A Focus on Building Energy Policy. Energies, 2014, 7, 5129-5150.   | 3.1  | 18        |
| 135 | Zoning-Based Vertical Transportation Optimization for Workers at Peak Time in a Skyscraper Construction. Computer-Aided Civil and Infrastructure Engineering, 2016, 31, 826-845.   | 9.8  | 18        |
| 136 | Improvements of the operational rating system for existing residential buildings. Applied Energy, 2017, 193, 112-124.  | 10.1 | 18        |
| 137 | Establishment of a base price for the Solar Renewable Energy Credit (SREC) from the perspective of residents and state governments in the United States. Renewable and Sustainable Energy Reviews, 2017, 75, 1066-1080.                | 16.4 | 18        |
| 138 | Multi-criteria decision support system of the photovoltaic and solar thermal energy systems using the multi-objective optimization algorithm. Science of the Total Environment, 2019, 659, 1100-1114.                                  | 8.0  | 18        |
| 139 | Emotional impact, task performance and task load of green walls exposure in a virtual environment. Indoor Air, 2022, 32, .   | 4.3  | 18        |
| 140 | A decision support system for determining the optimal size of a new expressway service area: Focused on the profitability. Decision Support Systems, 2014, 67, 9-20.   | 5.9  | 17        |
| 141 | Development of the life-cycle economic and environmental assessment model for establishing the optimal implementation strategy of the rooftop photovoltaic system. Technological and Economic Development of Economy, 2015, 24, 27-47. | 4.6  | 17        |
| 142 | Sensitivity Analysis on the Impact Factors of the GSHP System Considering Energy Generation and Environmental Impact Using LCA. Sustainability, 2016, 8, 376.  | 3.2  | 17        |
| 143 | New Internet search volume-based weighting method for integrating various environmental impacts. Environmental Impact Assessment Review, 2016, 56, 128-138.  | 9.2  | 17        |
| 144 | Framework for Approaching the Minimum CV(RMSE) using Energy Simulation and Optimization Tool. Energy Procedia, 2016, 88, 265-270.  | 1.8  | 17        |

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|-----|--|------|-----------|
| 145 | The optimal photovoltaic system implementation strategy to achieve the national carbon emissions reduction target in 2030: Focused on educational facilities. <i>Energy and Buildings</i> , 2016, 119, 101-110.                    | 6.7  | 17        |
| 146 | Automated classification of indoor environmental quality control using stacked ensembles based on electroencephalograms. <i>Computer-Aided Civil and Infrastructure Engineering</i> , 2020, 35, 448-464.                           | 9.8  | 17        |
| 147 | Framework of Manufacturer and Supplier Relationship in the Manufactured Housing Industry. <i>Journal of Management in Engineering - ASCE</i> , 2013, 29, 369-381.  | 4.8  | 16        |
| 148 | An integrated model for estimating the techno-economic performance of the distributed solar generation system on building façades: Focused on energy demand and supply. <i>Applied Energy</i> , 2018, 228, 1071-1090.              | 10.1 | 16        |
| 149 | 3D convolutional neural network-based one-stage model for real-time action detection in video of construction equipment. <i>Computer-Aided Civil and Infrastructure Engineering</i> , 2022, 37, 126-142.                           | 9.8  | 16        |
| 150 | Evaluation of the effect of a building energy efficiency certificate in reducing energy consumption in Korean apartments. <i>Energy and Buildings</i> , 2021, 248, 111168.   | 6.7  | 16        |
| 151 | Evaluation and determination of optimal MR&R strategies in concrete bridge decks. <i>Automation in Construction</i> , 2007, 16, 165-175.   | 9.8  | 15        |
| 152 | SPACE ZONING CONCEPT-BASED SCHEDULING MODEL FOR REPETITIVE CONSTRUCTION PROCESS. <i>Journal of Civil Engineering and Management</i> , 2013, 19, 409-421.   | 3.5  | 15        |
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