

Assoc. Prof. AYŞE PINAR MERT CÜCE

Personal Information

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Address: Recep Tayyip Erdogan University, Faculty of Engineering and Architecture, Department of Architecture, Zihni Derin Campus, 53100, Rize, Turkey

Education Information

Doctorate, University of Nottingham, Faculty of Engineering, Mechanical Engineering, England 2013 - 2016

Dissertations

Doctorate, Innovative Heating, Cooling and Ventilation Technologies For Low-Carbon Buildings, University of Nottingham, Faculty Of Engineering, Department Of Mechanical Engineering, 2016

Research Areas

Mechanical Engineering, Energy, Fluid Mechanics, Alternative Energy Resources, Solar energy, Advanced Energy Technologies, Thermodynamics, Heat and Mass Transfer, Heating, Refrigerating and Air Conditioning, Thermal Systems, Engineering and Technology

Academic Titles / Tasks

Associate Professor, Recep Tayyip Erdogan University, Mühendislik Ve Mimarlık Fakültesi, Mimarlık, 2021 - Continues
Associate Professor, Recep Tayyip Erdogan University, Mühendislik Ve Mimarlık Fakültesi, Enerji Sistemleri Mühendisliği, 2020 - 2021

Assistant Professor, Recep Tayyip Erdogan University, Mühendislik Ve Mimarlık Fakültesi, Enerji Sistemleri Mühendisliği, 2018 - 2020

Assistant Professor, Bayburt University, Faculty Of Engineering, Department Of Mechanical Engineering, 2017 - 2018

Expert PhD, University of Nottingham, Faculty Of Engineering, Department Of Architecture And Built Environment, 2015 - 2016

Research Assistant, University of Nottingham, Faculty Of Engineering, Department Of Architecture And Built Environment, 2012 - 2015

Academic and Administrative Experience

Head of Building Science Division, Recep Tayyip Erdogan University, Mühendislik Ve Mimarlık Fakültesi, Mimarlık, 2021 - Continues

Deputy Head of Department, Recep Tayyip Erdogan University, Mühendislik Ve Mimarlık Fakültesi, Enerji Sistemleri Mühendisliği, 2018 - 2021

Courses

ADVANCED FLUID MECHANICS, Postgraduate, 2020 - 2021
ENERGY EFFICIENCY AND MANAGEMENT, Undergraduate, 2018 - 2019
FLUID MECHANICS II, Undergraduate, 2018 - 2019
CLIMATE CHNAGE AND ENVIRONMENT, Postgraduate, 2018 - 2019
ENERGY MANAGEMENT IN INDUSTRY AND BUILDINGS, Postgraduate, 2018 - 2019
ADVANCED THERMODYNAMICS, Postgraduate, 2018 - 2019
FLUID MECHANICS I, Undergraduate, 2018 - 2019
ENERGY MANAGEMENT IN INDUSTRY, Undergraduate, 2018 - 2019
HYDOELECTRIC POWER PLANTS, Undergraduate, 2018 - 2019
HEAT PUMPS AND APPLICATIONS, Postgraduate, 2018 - 2019
HEAT TRANSFER II, Undergraduate, 2017 - 2018
HEAT TRANSFER I, Undergraduate, 2017 - 2018

Advising Theses

Cüce E., Mert Cüce A. P. , Güneş Bacası Güç Santrallerinin Parametrik Optimizasyonu, Postgraduate, H.ŞEN(Student), 2021
Cüce E., Mert Cüce A. P. , Termoelektrik soğutucularda nanoakışkan kullanımının soğutma gücü ve temel performans parametreleri üzerine etkisi, Postgraduate, T.GÜÇLÜ(Student), 2020
Cüce E., Mert Cüce A. P. , Boşluklu yapı elemanlarında geometrik optimizasyon ile ısı direncin iyileştirilmesi için termal stratejilerin geliştirilmesi, Postgraduate, A.BURHANEDDİN(Student), 2020

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **Harmonic problems in renewable and sustainable energy systems: A comprehensive review**
Eroğlu H., Cüce E., Mert Cüce A. P. , Gül F., İskenderoğlu A.
SUSTAINABLE ENERGY TECHNOLOGIES AND ASSESSMENTS, vol.48, pp.101566, 2021 (Journal Indexed in SCI Expanded)
- II. **Thin film coated windows towards low/zero carbon buildings: Adaptive control of solar, thermal, and optical parameters**
Cüce E., Mert Cüce A. P. , Riffat S.
SUSTAINABLE ENERGY TECHNOLOGIES AND ASSESSMENTS, vol.46, pp.101257, 2021 (Journal Indexed in SCI Expanded)
- III. **Impacts of ground slope on main performance figures of solar chimney power plants: A comprehensive CFD research with experimental validation**
Cüce E., Mert Cüce A. P. , Sen H., Sudhakar K., Berardi U., Serencam U.
International Journal Of Photoenergy, vol.2021, no.2021, pp.6612222, 2021 (Journal Indexed in SCI Expanded)
- IV. **Performance assessment of solar chimney power plants with the impacts of divergent and convergent chimney geometry**
Cüce E., Saxena A., Mert Cüce A. P. , Şen H., Guo S., Kumarasamy S.
INTERNATIONAL JOURNAL OF LOW-CARBON TECHNOLOGIES, vol.16, no.3, pp.704-714, 2021 (Journal Indexed in SCI Expanded)
- V. **Enhanced performance figures of solar cookers through latent heat storage and low-cost booster reflectors**
Mert Cüce A. P. , Kolaylı S., Cüce E.
INTERNATIONAL JOURNAL OF LOW-CARBON TECHNOLOGIES, vol.15, no.3, pp.427-433, 2020 (Journal Indexed in SCI Expanded)
- VI. **Improving thermal performance of thermoelectric coolers (TECs) through a nanofluid driven water to air heat exchanger design: An experimental research**
Cuce E., Guclu T., Cuce P. M.

ENERGY CONVERSION AND MANAGEMENT, vol.214, 2020 (Journal Indexed in SCI)

VII. **On the Use of Nanofluids in Solar Energy Applications**

Cuce E., Cuce P. M. , Guclu T., Besir A. B.

JOURNAL OF THERMAL SCIENCE, vol.29, no.3, pp.513-534, 2020 (Journal Indexed in SCI)

VIII. **Numerical performance modelling of solar chimney power plants: Influence of chimney height for a pilot plant in Manzanares, Spain**

CÜCE E., SEN H., CUCE P. M.

SUSTAINABLE ENERGY TECHNOLOGIES AND ASSESSMENTS, vol.39, 2020 (Journal Indexed in SCI)

IX. **Performance analysis of a novel solar desalination system - Part 1: The unit with sensible energy storage and booster reflector without thermal insulation and cooling system**

CÜCE E., Cuce P. M. , SAXENA A., GÜÇLÜ T., BESIR A. B.

SUSTAINABLE ENERGY TECHNOLOGIES AND ASSESSMENTS, vol.37, 2020 (Journal Indexed in SCI)

X. **Sustainable ventilation strategies in buildings: CFD research**

CÜCE E., Sher F., Sadiq H., Cuce P. M. , GÜÇLÜ T., BESIR A. B.

SUSTAINABLE ENERGY TECHNOLOGIES AND ASSESSMENTS, vol.36, 2019 (Journal Indexed in SCI)

XI. **Optimised performance of a thermally resistive PV glazing technology: An experimental validation**

CÜCE E., Cuce P. M.

ENERGY REPORTS, vol.5, pp.1185-1195, 2019 (Journal Indexed in SCI)

XII. **A novel method based on thermal conductivity for material identification in scrap industry: An experimental validation**

Cuce E., Cuce P. M. , Guclu T., Besir A., Gokce E., Serencam U.

MEASUREMENT, vol.127, pp.379-389, 2018 (Journal Indexed in SCI)

XIII. **Box type solar cookers with sensible thermal energy storage medium: A comparative experimental investigation and thermodynamic analysis**

Cuce P. M.

SOLAR ENERGY, vol.166, pp.432-440, 2018 (Journal Indexed in SCI)

XIV. **Concentrating photovoltaic thermal (CPVT) collectors and systems: Theory, performance assessment and applications**

DANESHAZARIAN R., Cuce E., Cuce P. M. , Sher F.

RENEWABLE & SUSTAINABLE ENERGY REVIEWS, vol.81, pp.473-492, 2018 (Journal Indexed in SCI)

XV. **Toward cost-effective and energy-efficient heat recovery systems in buildings: Thermal performance monitoring**

Cuce P. M. , Cuce E.

ENERGY, vol.137, pp.487-494, 2017 (Journal Indexed in SCI)

XVI. **An accurate model for photovoltaic (PV) modules to determine electrical characteristics and thermodynamic performance parameters**

Cuce E., Cuce P. M. , Karakas I. H. , BALI T.

ENERGY CONVERSION AND MANAGEMENT, vol.146, pp.205-216, 2017 (Journal Indexed in SCI)

XVII. **Solar Pond Window Technology for Energy-Efficient Retrofitting of Buildings: An Experimental and Numerical Investigation**

Cuce E., Cuce P. M.

ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, vol.42, no.5, pp.1909-1916, 2017 (Journal Indexed in SCI)

XVIII. **Thermal performance assessment of a novel liquid desiccant-based evaporative cooling system: An experimental investigation**

Cuce P. M.

ENERGY AND BUILDINGS, vol.138, pp.88-95, 2017 (Journal Indexed in SCI)

XIX. **Renewable and sustainable energy saving strategies for greenhouse systems: A comprehensive review**

Cuce E., Harjunowibowo D., Cuce P. M.

RENEWABLE & SUSTAINABLE ENERGY REVIEWS, vol.64, pp.34-59, 2016 (Journal Indexed in SCI)

XX. **Novel glazing technologies to mitigate energy consumption in low-carbon buildings: a comparative**

experimental investigation

Cuce E., Cuce P. M. , Riffat S.

INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.40, no.4, pp.537-549, 2016 (Journal Indexed in SCI)

- XXI. **The impact of internal aerogel retrofitting on the thermal bridges of residential buildings: An experimental and statistical research**
Cuce E., Cuce P. M.
ENERGY AND BUILDINGS, vol.116, pp.449-454, 2016 (Journal Indexed in SCI)
- XXII. **Energy saving potential of heat insulation solar glass: Key results from laboratory and in-situ testing**
Cuce E., Cuce P. M. , Young C.
ENERGY, vol.97, pp.369-380, 2016 (Journal Indexed in SCI)
- XXIII. **A state of the art review of evaporative cooling systems for building applications**
Cuce P. M. , Riffat S.
RENEWABLE & SUSTAINABLE ENERGY REVIEWS, vol.54, pp.1240-1249, 2016 (Journal Indexed in SCI)
- XXIV. **Vacuum glazing for highly insulating windows: Recent developments and future prospects**
Cuce E., Cuce P. M.
RENEWABLE & SUSTAINABLE ENERGY REVIEWS, vol.54, pp.1345-1357, 2016 (Journal Indexed in SCI)
- XXV. **A novel roof type heat recovery panel for low-carbon buildings: An experimental investigation**
Cuce P. M. , Cuce E., Riffat S.
ENERGY AND BUILDINGS, vol.113, pp.133-138, 2016 (Journal Indexed in SCI)
- XXVI. **Theoretical investigation of hot box solar cookers having conventional and finned absorber plates**
Cuce E., Cuce P. M.
INTERNATIONAL JOURNAL OF LOW-CARBON TECHNOLOGIES, vol.10, no.3, pp.238-245, 2015 (Journal Indexed in SCI)
- XXVII. **A comprehensive review of heat recovery systems for building applications**
Cuce P. M. , Riffat S.
RENEWABLE & SUSTAINABLE ENERGY REVIEWS, vol.47, pp.665-682, 2015 (Journal Indexed in SCI)
- XXVIII. **A successful application of homotopy perturbation method for efficiency and effectiveness assessment of longitudinal porous fins**
Cuce E., Cuce P. M.
ENERGY CONVERSION AND MANAGEMENT, vol.93, pp.92-99, 2015 (Journal Indexed in SCI)
- XXIX. **Tilt Angle Optimization and Passive Cooling of Building-Integrated Photovoltaics (BIPVs) for Better Electrical Performance**
Cuce E., Cuce P. M.
ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, vol.39, no.11, pp.8199-8207, 2014 (Journal Indexed in SCI)
- XXX. **Optimizing insulation thickness and analysing environmental impacts of aerogel-based thermal superinsulation in buildings**
Cuce E., Cuce P. M. , Wood C. J. , Riffat S. B.
ENERGY AND BUILDINGS, vol.77, pp.28-39, 2014 (Journal Indexed in SCI)
- XXXI. **Toward aerogel based thermal superinsulation in buildings: A comprehensive review**
Cuce E., Cuce P. M. , Wood C. J. , Riffat S. B.
RENEWABLE & SUSTAINABLE ENERGY REVIEWS, vol.34, pp.273-299, 2014 (Journal Indexed in SCI)
- XXXII. **An experimental analysis of illumination intensity and temperature dependency of photovoltaic cell parameters**
Cuce E., Cuce P. M. , BALI T.
APPLIED ENERGY, vol.111, pp.374-382, 2013 (Journal Indexed in SCI)
- XXXIII. **Comments on "Analytical expression for electrical efficiency of PV/T hybrid air collector" by S. Dubey, G.S. Sandhu, and G.N. Tiwari**
CÜCE E., CÜCE P. M.
INTERNATIONAL JOURNAL OF AMBIENT ENERGY, vol.36, no.4, pp.206-208, 2013 (Journal Indexed in SCI Expanded)
- XXXIV. **Homotopy perturbation method for temperature distribution, fin efficiency and fin effectiveness of**

convective straight fins with temperature-dependent thermal conductivity

Cuce E., Cuce P. M.

PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART C-JOURNAL OF MECHANICAL ENGINEERING SCIENCE, vol.227, no.8, pp.1754-1760, 2013 (Journal Indexed in SCI)

XXXV. A comprehensive review on solar cookers

Cuce E., Cuce P. M.

APPLIED ENERGY, vol.102, pp.1399-1421, 2013 (Journal Indexed in SCI)

XXXVI. Effects of concavity level on heat loss, effectiveness and efficiency of a longitudinal fin exposed to natural convection and radiation

Cuce E., Cuce P. M.

INTERNATIONAL JOURNAL OF NUMERICAL METHODS FOR HEAT & FLUID FLOW, vol.23, no.7, pp.1169-1178, 2013 (Journal Indexed in SCI)

XXXVII. A novel model of photovoltaic modules for parameter estimation and thermodynamic assessment

Mert Cüce A. P. , Cüce E.

INTERNATIONAL JOURNAL OF LOW-CARBON TECHNOLOGIES, vol.7, no.2, pp.159-165, 2012 (Journal Indexed in SCI Expanded)

Articles Published in Other Journals

- I. **Thermal behavior of human clothing in real-life conditions and its reflections on thermal comfort**
Mert Cüce A. P. , Cüce E., Sen H., Priya S. S. , Sukumaran S.
World Journal of Textile Engineering and Technology, vol.7, pp.25-35, 2021 (Journal Indexed in ESCI)
- II. **A systematic review of thermal insulation performance of hollow bricks as a function of hollow geometry**
MERT CÜCE A. P. , CÜCE E., Sudhakar K.
INTERNATIONAL JOURNAL OF AMBIENT ENERGY, 2021 (Journal Indexed in ESCI)
- III. **A thorough performance assessment of solar chimney power plants: Case study for Manzanares**
Cüce E., Mert Cüce A. P. , Şen H.
Cleaner Engineering and Technology, vol.1, pp.1-11, 2020 (Refereed Journals of Other Institutions)
- IV. **Improving Electricity Production in Solar Chimney Power Plants with Sloping Ground Design: An Extensive CFD Research**
Mert Cüce A. P. , Cüce E., Şen H.
Journal of Solar Energy Research Updates, vol.7, pp.122-131, 2020 (Refereed Journals of Other Institutions)
- V. **Improving thermal resistance of lightweight concrete hollow bricks: A numerical optimisation research for a typical masonry unit**
CÜCE E., MERT CÜCE A. P. , BEŞİR A. B.
Journal of Energy Systems, vol.4, no.3, pp.121-144, 2020 (Refereed Journals of Other Institutions)
- VI. **Heat transfer enhancement in cylindrical fins through longitudinal parabolic perforations**
Cuce E., Oztekin E. K. , Cuce P. M.
INTERNATIONAL JOURNAL OF AMBIENT ENERGY, vol.40, no.4, pp.406-412, 2019 (Journal Indexed in ESCI)
- VII. **Strategies for ideal indoor environments towards low/zero carbon buildings through a biomimetic approach**
Cuce E., Nachan Z., Cuce P. M., Sher F., NEIGHBOUR G. B.
INTERNATIONAL JOURNAL OF AMBIENT ENERGY, vol.40, no.1, pp.86-95, 2019 (Journal Indexed in ESCI)
- VIII. **Performance Assessment of Solar Chimneys: Part I – Impact of Chimney Height on Power Output**
CÜCE E., MERT CÜCE A. P.
Energy Research Journal, vol.10, no.1, pp.11-19, 2019 (Refereed Journals of Other Institutions)
- IX. **Performance Assessment of Solar Chimneys: Part 2 – Impacts of Slenderness Value and Collector Slope on Power Output**
CÜCE E., MERT CÜCE A. P.

Energy Research Journal, vol.10, no.1, pp.20-26, 2019 (Refereed Journals of Other Institutions)

- X. **Novel, Practical and Reliable Analytical Models to Estimate Electrical Efficiency of Building-Integrated Photovoltaic/Thermal (BIPVT) Collectors and Systems**
MERT CÜCE P.
Uludağ University Journal of The Faculty of Engineering, vol.23, no.3, pp.191-206, 2018 (Other Refereed National Journals)
- XI. **Smart Retrofit Solutions of Buildings toward a Low Carbon World**
CÜCE E., MERT CÜCE P.
Energy Research Journal, vol.9, no.1, pp.77-86, 2018 (Refereed Journals of Other Institutions)
- XII. **Hybrid Photovoltaic/Thermal (HPV/T) Systems: From Theory to Applications**
CÜCE E., ÖZTEKİN E. K. , MERT CÜCE P.
Energy Research Journal, vol.9, no.1, pp.1-71, 2018 (Refereed Journals of Other Institutions)
- XIII. **Impact of humidity on current parameters of solar cells**
CÜCE E., MERT CÜCE P., BALI T.
Journal of Energy Systems, vol.2, no.3, pp.84-96, 2018 (Refereed Journals of Other Institutions)
- XIV. **An Overview of Concentrating Photovoltaic Thermal (CPVT) Collectors**
DANESHAZARIAN R., CÜCE E., MERT CÜCE P.
Energy Research Journal, vol.8, no.1, pp.11-21, 2017 (Refereed Journals of Other Institutions)
- XV. **Energetic and exergetic performance assessment of solar cookers with different geometrical designs**
Cuce E., Cuce P. M.
INTERNATIONAL JOURNAL OF AMBIENT ENERGY, vol.36, no.2, pp.62-69, 2015 (Journal Indexed in ESCI)
- XVI. **Comments on "Analytical expression for electrical efficiency of PV/T hybrid air collector" by S. Dubey, G.S. Sandhu, and G.N. Tiwari**
Cuce P. M. , Cuce E.
INTERNATIONAL JOURNAL OF AMBIENT ENERGY, vol.36, no.4, pp.206-208, 2015 (Journal Indexed in ESCI)
- XVII. **Optimization of configurations to enhance heat transfer from a longitudinal fin exposed to natural convection and radiation**
Cuce P. M. , CÜCE E.
INTERNATIONAL JOURNAL OF LOW-CARBON TECHNOLOGIES, vol.9, no.4, pp.305-310, 2014 (Journal Indexed in ESCI)
- XVIII. **Improving thermodynamic performance parameters of silicon photovoltaic cells via air cooling**
CÜCE E., Cuce P. M.
INTERNATIONAL JOURNAL OF AMBIENT ENERGY, vol.35, no.4, pp.193-199, 2014 (Journal Indexed in ESCI)
- XIX. **He's homotopy perturbation method for prey and predator problem considering real life situations**
CÜCE E., MERT CÜCE P.
Far East Journal of Applied Mathematics, vol.76, no.1, pp.13-24, 2013 (Refereed Journals of Other Institutions)
- XX. **A novel model of photovoltaic modules for parameter estimation and thermodynamic assessment**
Cuce P. M. , Cuce E.
INTERNATIONAL JOURNAL OF LOW-CARBON TECHNOLOGIES, vol.7, no.2, pp.159-165, 2012 (Journal Indexed in ESCI)

Books & Book Chapters

- I. **Thermal properties of aerogels: From theory to practice**
CÜCE E., MERT CÜCE A. P. , GUCLU T., BESIR A. B.
in: Translucent silica aerogel: Properties, preparation and applications, Cinzia Buratti, Editor, Nova Science Publishers, Italy, pp.1-306, 2019
- II. **Low/Zero-Carbon Buildings for a Sustainable Future**
CÜCE E., Beşir A. B. , MERT CÜCE A. P.
in: Low Carbon Transition, Valter Silva, Editor, Intech Open University Press, London, pp.29-50, 2018

Refereed Congress / Symposium Publications in Proceedings

- I. **A review on liquid desiccant based dehumidification systems**
MERT CÜCE A. P. , ÖZTÜRK K., CÜCE E.
2. Uluslararası 19 Mayıs Yenilikçi Bilimsel Yaklaşımlar Kongresi, Samsun, Turkey, 27 - 29 December 2019
- II. **Thermal performance assessment of solar box cookers with propolis based latent heat storage and low-cost booster reflectors**
MERT CÜCE A. P. , KOLAYLI S., CÜCE E.
Eighteenth International Conference on Sustainable Energy Technologies, Kuala-Lumpur, Malaysia, 20 - 22 August 2019
- III. **Thermal performance of a novel thermoelectric refrigerator with a water to air heat exchanger and SiO₂, TiO₂ and Al₂O₃ nanofluids**
MERT CÜCE A. P. , RIFFAT S., CÜCE E.
Eighteenth International Conference on Sustainable Energy Technologies, Kuala-Lumpur, Malaysia, 20 - 22 August 2019
- IV. **Experimental performance investigation of A solar powered water distillation system enhanced with passive solar reflector and sensible heat storage medium**
MERT CÜCE P.
Ereğli International Science and Academic Congress, Konya, Turkey, 9 - 10 March 2019
- V. **Optical performance parameters of thermally resistive PV glazing (TR-PVG)**
MERT CÜCE A. P. , CÜCE E.
International Conference on Photonics Research, Kastamonu, Turkey, 8 - 12 November 2018, pp.1
- VI. **Thermally resistive PV glazing (TR-PVG) systems**
CÜCE E., MERT CÜCE P., GÜÇLÜ T., BEŞİR A. B.
International Congress on Engineering and Life Science, 26 - 29 April 2018
- VII. **U-value analysis of argon filled double glazed windows**
CÜCE E., MERT CÜCE P., BEŞİR A. B. , GÜÇLÜ T.
International Congress on Engineering and Life Science, 26 - 29 April 2018
- VIII. **Global necessity to nearly zero-energy buildings (nZEB)**
BEŞİR A. B. , GÜÇLÜ T., MERT CÜCE P., CÜCE E.
International Congress on Engineering and Life Science, 26 - 29 April 2018
- IX. **A new technique for sorting of metals in scrap industry.**
MERT CÜCE P., CÜCE E., GÜÇLÜ T., BEŞİR A. B. , Gökçe E.
International Congress on Engineering and Life Science, 26 - 29 April 2018
- X. **Role of greenery systems in the U-value of building envelopes**
BEŞİR A. B. , GÜÇLÜ T., MERT CÜCE P., CÜCE E.
International Congress on Engineering and Life Science, 26 - 29 April 2018
- XI. **Thermoelectric refrigeration systems: From theory to applications**
GÜÇLÜ T., BEŞİR A. B. , MERT CÜCE P., CÜCE E.
International Congress on Engineering and Life Science, 26 - 29 April 2018
- XII. **Role of greenery systems in the U-value of building envelopes**
BEŞİR A. B. , GÜÇLÜ T., MERT CÜCE A. P. , CÜCE E.
International Congress on Engineering and Life Science, Kastamonu, Turkey, 26 - 29 April 2018, pp.1
- XIII. **A new technique for sorting of metals in scrap industry. International Congress on Engineering and Life Science**
MERT CÜCE A. P. , CÜCE E., GÜÇLÜ T., BEŞİR A. B. , GÖKÇE E.
International Congress on Engineering and Life Science, Kastamonu, Turkey, 26 - 29 April 2018, pp.1
- XIV. **Thermoelectric refrigeration systems: From theory to applications**
GÜÇLÜ T., BEŞİR A. B. , MERT CÜCE A. P. , CÜCE E.
International Congress on Engineering and Life Science, Kastamonu, Turkey, 26 - 29 April 2018, pp.1
- XV. **Thermal performance assessment of thermoelectric coolers for micro space cooling**

- GÜÇLÜ T., BEŞİR A. B. , MERT CÜCE P., CÜCE E.
International Conference on Engineering Technologies, Konya, Turkey, 7 - 09 December 2017
- XVI. **Photovoltaic thermal (PV/T) powered multi-generation systems: A review**
ÖZTEKİN E. K. , MERT CÜCE P., CÜCE E.
International Conference on Engineering Technologies, Konya, Turkey, 7 - 09 December 2017
- XVII. **The comparison of greenery systems in terms of energy saving**
GÜÇLÜ T., BEŞİR A. B. , MERT CÜCE P., CÜCE E.
International Conference on Engineering Technologies, 7 - 09 December 2017
- XVIII. **Thermoelectric coolers (TECs) for potential air-conditioning applications in buildings**
GÜÇLÜ T., MERT CÜCE P., BEŞİR A. B. , CÜCE E.
International Symposium on Multidisciplinary Studies and Innovative Technologies, 2 - 04 November 2017
- XIX. **Buildings of future: Smart, low-cost and energy-efficient solutions**
CÜCE E., MERT CÜCE P.
Second International Conference on Industrial, Mechanical, Electrical and Chemical Engineering and Annual Conference on Industrial and System Engineering, 6 - 07 October 2016
- XX. **The role of plants in temperature regulation of external walls: An experimental and numerical research**
CÜCE E., MERT CÜCE P., SHER F., BALI T.
Fifteenth International Conference on Sustainable Energy Technologies, 19 - 22 July 2016
- XXI. **Cost-effective and energy-efficient strategies for greenhouse systems: A comprehensive review**
CÜCE E., MERT CÜCE P.
Fifteenth International Conference on Sustainable Energy Technologies, 19 - 22 July 2016
- XXII. **Toward cost-effective and energy-efficient evaporative cooling systems in buildings**
MERT CÜCE P.
Fifteenth International Conference on Sustainable Energy Technologies, 19 - 22 July 2016
- XXIII. **Concentrated Photovoltaic Thermal (CPVT) solar collector systems: State-of-the-art, fundamental and design key-factors**
DANESHAZARIAN R., CÜCE E., MERT CÜCE P.
Fifteenth International Conference on Sustainable Energy Technologies, 19 - 22 July 2016
- XXIV. **In-situ thermal performance monitoring of a novel domestic heat recovery unit**
MERT CÜCE P., CÜCE E., BAYRAKTAR K. G. , RIFFAT S.
Fifteenth International Conference on Sustainable Energy Technologies, 19 - 22 July 2016
- XXV. **Cooling Applications with Renewable Energy Powered Resorption Systems**
PASTAKKAYA B., CÜCE E., MERT CÜCE A. P.
Fourteenth International Conference on Sustainable Energy Technologies, 25 - 27 August 2015
- XXVI. **Thermal performance assessment of porous fins via homotopy perturbation method**
CÜCE E., MERT CÜCE P.
Fourteenth International Conference on Sustainable Energy Technologies, 25 - 27 August 2015
- XXVII. **Building applications of heat recovery systems: A review**
MERT CÜCE P., BAYRAKTAR K. G. , RIFFAT S., SIDDIG O.
Fourteenth International Conference on Sustainable Energy Technologies, 25 - 27 August 2015
- XXVIII. **Preliminary performance investigation of a novel direct contact evaporative cooling system**
MERT CÜCE P., BAYRAKTAR K. G. , RIFFAT S., SIDDIG O.
Fourteenth International Conference on Sustainable Energy Technologies, 25 - 27 August 2015
- XXIX. **Toward low-carbon HVAC technologies in buildings**
MERT CÜCE P.
ETRI Solar Energy Workshop, 18 February 2015
- XXX. **An experimental study on a novel heat recovery system**
MERT CÜCE P., RIFFAT S., BAYRAKTAR K. G.
Thirteenth International Conference on Sustainable Energy Technologies, 25 - 28 August 2014
- XXXI. **Novel heat recovery technologies for domestic applications**

MERT CÜCE P.

Novel energy and biotechnology developments in the sustainable built environment, 24 - 27 March 2014

- XXXII. **Tilt angle optimization of building-integrated photovoltaics (BIPVs) for cooler operating temperatures**
CÜCE E., MERT CÜCE P.
MEGS IV Annual Conference, 12 - 13 September 2013
- XXXIII. **Passive cooling of building-integrated photovoltaics (BIPVs) for better electrical performance**
MERT CÜCE P., CÜCE E.
MEGS IV Annual Conference, 12 - 13 September 2013
- XXXIV. **Theoretical investigation of solar powered heat recovery panels in buildings**
MERT CÜCE P., CÜCE E., RIFFAT S.
Twelfth International Conference on Sustainable Energy Technologies, 26 - 29 August 2013
- XXXV. **Optimum insulation thickness of aerogel in buildings**
CÜCE E., MERT CÜCE P., RIFFAT S.
Twelfth International Conference on Sustainable Energy Technologies, 26 - 29 August 2013
- XXXVI. **Second law analysis of solar powered heat recovery panels in buildings**
MERT CÜCE P., CÜCE E., RIFFAT S.
Twelfth International Conference on Sustainable Energy Technologies, 26 - 29 August 2013
- XXXVII. **Effects of concavity level on heat loss, effectiveness and efficiency of a longitudinal fin exposed to natural convection and radiation**
MERT CÜCE P., CÜCE E.
Tenth International Conference on Sustainable Energy Technologies, 4 September - 07 June 2011

Supported Projects

MERT CÜCE A. P. , CÜCE E., EU Framework Program Project, HERB – Holistic energy-efficient retrofitting of residential buildings, 2012 - 2016

CÜCE E., MERT CÜCE A. P. , EU Framework Program Project, Development of heat insulation solar glass for low-carbon buildings, 2014 - 2015

CÜCE E., MERT CÜCE A. P. , EU Supported Other Project, The EoN house retrofit research project, 2012 - 2013

Activities in Scientific Journals

Peer Review Journal of Solar & Photoenergy Systems, Editor, 2018 - Continues

Educational Research Applications, Editor, 2017 - Continues

Emergency Medicine Investigations, Editor, 2017 - Continues

Scientific Refereeing

Energy and Buildings, SCI Journal, January 2017

Building and Environment, SCI Journal, January 2017

Energy Efficiency, SCI Journal, January 2017

International Journal of Sustainable Energy, Other Indexed Journal, January 2017

Journal of Renewable and Sustainable Energy, SCI Journal, January 2017

International Journal of Ambient Energy, Other Indexed Journal, January 2016

Energy Conversion and Management, SCI Journal, January 2014

International Journal of low-carbon technologies, SCI Journal, January 2014

Applied Thermal Engineering, SCI Journal, January 2013

Applied Energy, SCI Journal, January 2013

Edit Congress and Symposium Activities

Novel Energy and Biotechnology Developments in the Sustainable Built Environment, Invited Speaker, İstanbul, Turkey, 2014

East Midlands Universities Conference at the University of Leicester, Invited Speaker, Leicester, United Kingdom, 2013

Citations

Total Citations (WOS):1612

h-index (WOS):20

Scholarships

Post-Doctorate Research Fellowship Post in the Institute of Sustainable Energy Technologies, Department of Architecture and Built Environment, Faculty of Engineering, University of Nottingham, University, 2015 - 2016

Postgraduate Research Scholarship of Doctoral research in Sustainable Energy Technologies at the University of Nottingham, University, 2013 - 2015

Awards

MERT CÜCE A. P. , Highly Cited Paper Award from Web of Science. A state of the art review of evaporative cooling. (%1 in the relevant academic field), Thomson Reuters, January 2018

MERT CÜCE A. P. , Highly Cited Paper Award from Web of Science. A comprehensive review of heat recovery. (%1 in the relevant academic field), Thomson Reuters, January 2018

MERT CÜCE A. P. , CÜCE E., Hot Paper and Highly Cited Paper Award from Web of Science. Toward aerogel based thermal superinsulation in buildings: A comprehensive review. (%0.1 in the relevant academic field), Thomson Reuters, December 2017

MERT CÜCE A. P. , CÜCE E., Highly Cited Paper Award from Web of Science. A state-of-the-art review on innovative glazing technologies. (%1 in the relevant academic field), Thomson Reuters, December 2017

MERT CÜCE A. P. , Most-cited Article in International Journal of Low-Carbon Technologies through the paper entitled "A novel model of photovoltaic modules for parameter estimation and thermodynamic assessment", International Journal of Low-Carbon Technologies, January 2015