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Education Information

Post Doctorate, University of Nottingham, Faculty Of Engineering, Institute Of Sustainable Energy Technologies, United Kingdom 2014 - 2016

Doctorate, The University of Nottingham, Faculty Of Engineering, Institute Of Sustainable Energy Technologies, United Kingdom 2012 - 2014

Postgraduate, University of London, Birbeck College, London Foundation Campus, Master's Foundation Programme (Mfp) In Engineering, United Kingdom 2011 - 2012

Postgraduate, Karadeniz Technical University, Mühendislik Fakültesi, Makine Mühendisliği, Turkey 2006 - 2009

Undergraduate, Bursa Uludağ University, Mühendislik Fakültesi, Makina Mühendisliği, Turkey 2002 - 2006

Foreign Languages

English, C1 Advanced

Research Areas

Energy, Alternative Energy Resources, Energy storage technologies, Solar energy, Advanced Energy Technologies, Thermodynamics, Heat and Mass Transfer, Heating, Refrigerating and Air Conditioning, Thermal Systems, Numerical Analysis

Academic Titles / Tasks

Associate Professor, Recep Tayyip Erdogan University, MÜHENDİSLİK VE MİMARLIK FAKÜLTESİ, MAKİNE MÜHENDİSLİĞİ, 2021 - Continues

Academic and Administrative Experience

TTO Koordinatörü, Recep Tayyip Erdogan University, MÜHENDİSLİK VE MİMARLIK FAKÜLTESİ, MAKİNE MÜHENDİSLİĞİ, 2022 - Continues

Head of Department, Recep Tayyip Erdogan University, MÜHENDİSLİK VE MİMARLIK FAKÜLTESİ, MAKİNE MÜHENDİSLİĞİ, 2020 - 2021

Advising Theses

Mert Cüce A. P., Cüce E., Duyulur ısı depolamalı güneş enerjisi destekli su damıtma sisteminin performans parametrelerinin deneysel incelenmesi, Postgraduate, A.TONYALI(Student), 2022

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

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Performance and emission characteristics of hydrogen enriched CNG in a dual fuel diesel engine: An experimental and numerical research**
Saadia R., Hamdi F., Krothi M., Bouabıdı A., Cüce E., Köten H., Miraoui I.
RENEWABLE ENERGY, vol.241, pp.122387, 2025 (SCI-Expanded)
- II. **Optimization on the structure and filling ratio of a flexible separate heat pipe applied for tracking-type photovoltaic/thermal systems**
Zheng L., Cao J., Peng J., Lu Z., Hong X., CÜCE E., Liu W., Pei G., Ji J.
Renewable Energy, vol.239, 2025 (SCI-Expanded)
- III. **Numerical investigation on heat transfer and flow mechanism in microchannel heat sink having V shape ribs**
Ali N., Haque I., Alam T., Siddiqui T. U., Ansari M. A., Yadav J., Srivastava S., CÜCE E., Ashraf I., Dobrotă D.
Case Studies in Thermal Engineering, vol.65, 2025 (SCI-Expanded)
- IV. **Energy Efficiency in Portuguese Traditional Cheese Industries: A Comprehensive Case Study**
Nunes J., Silva P. D., Andrade L. P., Gaspar P. D., Mert Cüce A. P., Cüce E., Yılmaz Y. N.
ENERGIES, vol.18, no.3, pp.562, 2025 (SCI-Expanded)
- V. **Nanotechnology and LSTM machine learning algorithms in advanced fuel spray dynamics in CI engines with different bowl geometries**
Venu H., Soudagar M. E. M., Kiong T. S., Razali N. M., Wei H., Rajabi A., Raju V. D., Khan T. M. Y., Almakayeel N., Cüce E., et al.
SCIENTIFIC REPORTS, vol.15, pp.983, 2025 (SCI-Expanded)
- VI. **A Short Review on Nano-Additives to Enhance Biodiesel Performance in Diesel Engines**
Jathar L. D., Nesa M., Shelare S., Shahapurkar K., Abedin T., Farade R. A., Rajabi A., Khan T. Y., Singh R., Cüce E., et al.
JOURNAL OF THERMAL SCIENCE, vol.34, no.1, pp.1-24, 2025 (SCI-Expanded)
- VII. **Smart grid and application of big data: Opportunities and challenges**
Mohanty A., Ramasamy A., Verayiah R., Bastia S., Swaroop Dash S., Soudagar M. E. M., Yunus Khan T., CÜCE E.
Sustainable Energy Technologies and Assessments, vol.71, 2024 (SCI-Expanded)
- VIII. **Divergent chimney and sloping collector design for ground heat source integrated solar chimney power plants**
Cüce E.
Journal of Thermal Analysis and Calorimetry, vol.149, no.18, pp.10973, 2024 (SCI-Expanded)

- IX. **Optical power monitoring systems for offshore wind farms: A literature review**
Mohanty S., Ramasamy A., Mohanty A., Mohanty P. P., Soudagar M. E. M., Khan T. Y., Cüce E.
SUSTAINABLE ENERGY TECHNOLOGIES AND ASSESSMENTS, vol.72, pp.104029, 2024 (SCI-Expanded)
- X. **Characterization Methods for Azobenzene Photoisomerization Energy Storage: A Review**
Zhang J., Zhang L., Jin G., Lin C., Cüce E., Guo S.
JOURNAL OF THERMAL SCIENCE, vol.2003, no.3, pp.11630, 2024 (SCI-Expanded)
- XI. **CFD analysis of the impact of air gap width on Trombe wall performance**
Friji K., Ghriess O., Bouabidi A., Cüce E., Alshahrani S.
Energy Science and Engineering, vol.5, pp.1-15, 2024 (SCI-Expanded)
- XII. **Anti-solvent materials enhanced structural and optical properties on ambiently fabricated perovskite thin films**
Nur-E-Alam M., Islam M. A., Kar Y. B., Kiong T. S., Misran H., Khandaker M. U., Fouad Y., Soudagar M. E. M., Cüce E.
SCIENTIFIC REPORTS, vol.14, pp.22006, 2024 (SCI-Expanded)
- XIII. **Unlocking energy efficiency: Experimental investigation of bamboo fibre reinforced briquettes as sustainable solution with enhanced thermal resistance**
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CASE STUDIES IN THERMAL ENGINEERING, vol.60, pp.104680, 2024 (SCI-Expanded)
- XIV. **Energy consumption, power generation and performance analysis of solar photovoltaic module based building roof**
Wei L., Islam M., Hasanuzzaman M., CÜCE E.
JOURNAL OF BUILDING ENGINEERING, vol.90, pp.109361, 2024 (SCI-Expanded)
- XV. **Thermal comfort inside a gable-roofed metallic shed in a higher educational institution: a case study and detailed analysis**
Jaffar A. A., Pandiaraj S., Govindasamy K., Sharma K., Muthusamy S., Siddiqui M. I. H., Cüce E., Shah M. A.
INTERNATIONAL JOURNAL OF LOW CARBON TECHNOLOGIES, vol.19, pp.1660-1673, 2024 (SCI-Expanded)
- XVI. **Improvement of azobenzene photothermal energy storage density via grafting onto g-C₃N₄ and introducing hydrogen bonding**
Zhang L., Jin Y., Jin J., Guo C., Xiong R., Cüce E., Jin G., Guo S.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.83, pp.673-681, 2024 (SCI-Expanded)
- XVII. **Parametric optimization for enhancing the electrical performance of hybrid photovoltaic/thermal and thermally regenerative electrochemical cycle system**
Sha Y., Tang X., Cüce E., Li G., Zhao X.
ENERGY, vol.307, pp.132699, 2024 (SCI-Expanded)
- XVIII. **ANN and CFD driven research on main performance characteristics of solar chimney power plants: Impact of chimney and collector angle**
MERT CÜCE A. P., CÜCE E., Mandal D., Gayen D., Asif M., Bouabidi A., Alshahrani S., Prakash C., Soudagar M.
CASE STUDIES IN THERMAL ENGINEERING, vol.60, pp.104568, 2024 (SCI-Expanded)
- XIX. **A state-of-art review on photovoltaic systems: Design, performance, and progress**
Saxena A., Kumar R., Sagade A. A., Singh D. B., Tyagi V., Cüce E., Goel V.
PROCESS SAFETY AND ENVIRONMENTAL PROTECTION, vol.190, pp.1324-1354, 2024 (SCI-Expanded)
- XX. **A Review and Classification of Conventional, Advanced, Smart and Multifunctional Glazing Technologies for Low-Carbon Building and Applications**
Mert Cüce A. P., Güçlü T., Cüce E.
INTERNATIONAL JOURNAL OF GLOBAL WARMING, vol.34, pp.1-3, 2024 (SCI-Expanded)
- XXI. **Power system resilience and strategies for a sustainable infrastructure: A review**
Mohanty A., Ramasamy A., Verayiah R., Bastia S., Dash S. S., Cüce E., Khan T. Y., Soudagar M. E. M.
AEJ - ALEXANDRIA ENGINEERING JOURNAL, vol.105, pp.261-279, 2024 (SCI-Expanded)
- XXII. **Enhanced convective heat transfer with Al₂O₃-water nanofluid in a PCM-based thermal energy storage system**
Roy A., Venkitaraj K., Vigneshwaran P., Saboor S., Cüce E., Saxena K. K.
JOURNAL OF ENERGY STORAGE, vol.97, pp.112853, 2024 (SCI-Expanded)

- XXIII. **Impact of support pillars geometry on thermal insulation performance of vacuum glazing: CFD research and exergy analysis**
Mert Cüce A. P., Cüce E., Şen H.
INTERNATIONAL JOURNAL OF EXERGY, vol.44, no.3/4, pp.188-203, 2024 (SCI-Expanded)
- XXIV. **Micro-scale Fuel Cell cogeneration system response combined with heat pump consumption in arid zones.**
Bendaikha W., Ghriss O., Larbi S., Bouabidi A., Cüce E.
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- XXV. **Assessment of higher demand of household energy consumption in different households in India: an inter-comparative study and solar savings valuation**
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- XXVI. **Assessing performance of an external compound parabolic concentrator solar collector with cascaded latent heat thermal storage**
Satchi C., Muthuraman P., Thakur A., MERT CÜCE A. P., CÜCE E., Balavadivel R.
ENVIRONMENTAL PROGRESS & SUSTAINABLE ENERGY, vol.43, no.4, 2024 (SCI-Expanded)
- XXVII. **Characteristics of the built environment in the Eastern Mediterranean and Middle East and related energy and climate policies**
Carlucci S., Lange M., Artopoulos G., Albuflasa H., Assimakopoulos M., Attia S., Azar E., CÜCE E., Hajiah A., Meir I, et al.
ENERGY EFFICIENCY, vol.17, no.5, pp.52, 2024 (SCI-Expanded)
- XXVIII. **Heat dissipation and fluid flow in micro-channel heat sink equipped with semi-elliptical pin-fin structures: A numerical study**
Ali N., Srivastava S., Haque I., Yadav J., Alam T., Siddiqui T., Siddiqui M., CÜCE E.
INTERNATIONAL COMMUNICATIONS IN HEAT AND MASS TRANSFER, vol.155, pp.107492, 2024 (SCI-Expanded)
- XXIX. **Current trends and biotechnology infused cleaner production of biomaterials for the construction industry: A critical review**
Sivalinga V., Devarajan P., Ramalingam B., Soudagar M., Mohanavel V., Khan T., Shahapurkar K., CÜCE E.
INTERNATIONAL JOURNAL OF LOW-CARBON TECHNOLOGIES, vol.19, pp.833-849, 2024 (SCI-Expanded)
- XXX. **Design, modelling, environmental, economic and performance analysis of parabolic trough solar collector (PTC) based cogeneration systems assisted by thermoelectric generators (TEGs)**
MERT CÜCE A. P., Guclu T., CÜCE E.
SUSTAINABLE ENERGY TECHNOLOGIES AND ASSESSMENTS, vol.64, pp.103745, 2024 (SCI-Expanded)
- XXXI. **Contemporary Evaporative Cooling System with Indirect Interaction in Construction Implementations: A Theoretical Exploration**
MERT CÜCE A. P., CÜCE E., Riffat S.
BUILDINGS, vol.14, no.4, pp.994, 2024 (SCI-Expanded)
- XXXII. **Optimizing soybean biofuel blends for sustainable urban medium-duty commercial vehicles in India: an AI-driven approach**
Rajak U., Chaurasiya P. K., Verma T. N., Dasore ., Ağbulut Ü., Meshram ., Saleel ., Saboor ., Cüce E., Mian Z.
ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH, vol.32, pp.26400, 2024 (SCI-Expanded)
- XXXIII. **Continuous electricity generation from diurnal and seasonal air temperature variation**
Tang X., Cuce E., Li G., Zhao X.
Applied Thermal Engineering, vol.241, 2024 (SCI-Expanded)
- XXXIV. **Systematic inspection on the interplay between MoNa-induced sodium and the formation of MoSe₂ intermediate layer in CIGSe/Mo heterostructures**
Za'Abbar F. ', Doroody C., Soudagar M. E. M., Chelvanathan P., Abdullah W. S. W., Zuhd A. W. M., Cüce E., Saboor S.
ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH, vol.31, no.15, pp.1-13, 2024 (SCI-Expanded)
- XXXV. **Fire retardation, compressive strength and durability analysis of concrete reinforced with novel plasters: An experimental, computational and statistical research**
Ustabas I., Cuce P., Alvur E., Kesepara D., Yilmaz Y., Cuce E., Alshahrani S.

- CASE STUDIES IN THERMAL ENGINEERING, vol.55, pp.104156, 2024 (SCI-Expanded)
- XXXVI. **Thermal and energy analysis of a novel solar updraft tower design with divergent chimney and convergent collector concept: CFD analysis with experimental validation**
Mert Cüce A. P., Saxena A., Cüce E., Kontoleon K. J., Oztekin E. K., Shaik S., Guo S.
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- XXXVII. **Solar Chimney Power Plants for Sustainable Air Quality Management Integrating Photocatalysis and Particulate Filtration: A Comprehensive Review**
Mandal D., Bose S., Biswas N., Manna N., CÜCE E., Benim A.
SUSTAINABILITY, vol.16, no.6, pp.2334, 2024 (SCI-Expanded)
- XXXVIII. **Thermal Analysis of Building Roofs with Latent Heat Storage for Reduction in Energy Consumption and CO₂ Emissions: An Experimental and Numerical Research**
CÜCE E., Shaik S., Roy A., Arumugam C., Afzal A., MERT CÜCE A. P., Ghosh A., Alam T., Shaik S.
ADVANCES IN CIVIL ENGINEERING, vol.2024, pp.1-15, 2024 (SCI-Expanded)
- XXXIX. **Passive sustainability strategies in traditional Gaziantep residences: a critical report on historical development**
Anaç M., Mert Cüce P., Cüce E.
INTERNATIONAL JOURNAL OF LOW CARBON TECHNOLOGIES, vol.19, pp.245-256, 2024 (SCI-Expanded)
- XL. **An overview of the existing and future state of the art advancement of hybrid energy systems based on PV-solar and wind**
Soudagar M., Ramesh S., Khan T., Almakayeel N., Ramesh R., Ghazali N., CÜCE E., Shelare S.
INTERNATIONAL JOURNAL OF LOW-CARBON TECHNOLOGIES, vol.19, pp.207-216, 2024 (SCI-Expanded)
- XLI. **Analysis of the benefits of adopting roof sandwich panels integrated with PCM versus PUR to mitigate energy costs and carbon dioxide emissions**
Arumugam C., Shaik S., Roy A., Kontoleon K. J., CÜCE E., Shaik A. H., Chakraborty S., Alwetaishi M., MERT CÜCE A. P., Gupta M.
Journal of Energy Storage, vol.77, 2024 (SCI-Expanded)
- XLII. **Alumina and titanium nanoparticles to diesel-Guizotia abyssinica (L.) biodiesel blends on MFVCR engine performance and emissions**
Abishek M., Kachhap S., Rajak U., Verma T. N., Singh T. S., Shaik S., Cüce E., Alwetaishi M.
SUSTAINABLE ENERGY TECHNOLOGIES AND ASSESSMENTS, vol.61, pp.103580, 2024 (SCI-Expanded)
- XLIII. **Experimental studies and comprehensive computational investigations on composites-based phase change material for battery thermal management systems in electric vehicles**
Subramanian M., Solomon J. M., Raja V., Arputharaj B. S., Shaik S., Saleel C. A., Alwetaishi M., Cüce E.
JOURNAL OF ENERGY STORAGE, vol.82, pp.110471, 2024 (SCI-Expanded)
- XLIV. **Analysing the impact of insulating material properties on the thermal performance of a novel composite precast concrete walling system exposed to elevated temperatures**
Kontoleon K., Bakas I., CÜCE E., Saboor S., Torres M., Georgiadis-Filikas K., Kotsovinos P., Efthymiou E., Tsikaloudaki K.
CONSTRUCTION AND BUILDING MATERIALS, vol.398, pp.132501, 2023 (SCI-Expanded)
- XLV. **Experimental performance assessment of a novel insulation plaster as an energy-efficient retrofit solution for external walls: A key building material towards low/zero carbon buildings**
Cüce E., Mert Cüce A. P., Alvur E., Yilmaz Y. N., Saboor S., Ustabaş İ., Linul E., Asif M.
CASE STUDIES IN THERMAL ENGINEERING, vol.49, 2023 (SCI-Expanded)
- XLVI. **Fast Pyrolysis of Tea Bush, Walnut Shell, and Pine Cone Mixture: Effect of Pyrolysis Parameters on Pyrolysis Crop Yields**
KAR T., Kaygusuz Ö., Güney M. Ş., CÜCE E., KELEŞ S., Shaik S., Owolabi A. B., Nsafon B. E. K., Ogunsua J. M., Huh J.
SUSTAINABILITY, vol.15, no.18, 2023 (SCI-Expanded)
- XLVII. **Integration of smart grid with renewable energy sources: Opportunities and challenges-A comprehensive review**
Kataray T., Nitesh B., Yarram B., Sinha S., CÜCE E., Shaik S., Vigneshwaran P., Roy A.
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- XLVIII. Experimental analysis on the impacts of soil deposition and bird droppings on the thermal performance of photovoltaic panels**
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CASE STUDIES IN THERMAL ENGINEERING, vol.48, pp.103128, 2023 (SCI-Expanded)
- XLIX. Extensive Analysis of a Reinvigorated Solar Water Heating System Using Low-Density Polyethylene Glazing**
Duraivel B, Muthuswamy N, Shaik S, CÜCE E, Owolabi A, Li H, Kavgiç M.
ENERGIES, vol.16, no.16, pp.5902, 2023 (SCI-Expanded)
- L. Thermodynamic Performance Analysis of a Low-Cost, Recycled and Energy-Efficient Solar Air Heater with Waste Beverage Cans: An Experimental Research**
Mert Cüce A. P., Saxena A., Cüce E., Yilmaz Y. N., Shaik S., Guo S.
JOURNAL OF THERMAL SCIENCE, vol.32, no.4, pp.1657-1670, 2023 (SCI-Expanded)
- LI. Renewable energy potential towards attainment of net-zero energy buildings status-A critical review**
Christopher S, Vikram M, Bakli C, Thakur A, Ma Y, Ma Z, Xu H, MERT CÜCE A. P., CÜCE E., Singh P.
JOURNAL OF CLEANER PRODUCTION, vol.405, pp.136942, 2023 (SCI-Expanded)
- LII. Experimental studies of latent heat storage based solar air heater for space heating: A comparative analysis**
Saxena A, CÜCE E., Singh D, Sethi M, MERT CÜCE A. P., Sagade A, Kumar A.
JOURNAL OF BUILDING ENGINEERING, vol.69, pp.106282, 2023 (SCI-Expanded)
- LIII. Solar Salt with Carbon Nanotubes as a Potential Phase Change Material for High-Temperature Applications: Investigations on Thermal Properties and Chemical Stability**
Vigneshwaran P, Shaik S, Suresh S, Abbas M, Saleel C, CÜCE E.
ACS OMEGA, vol.8, no.20, pp.17563-17572, 2023 (SCI-Expanded)
- LIV. Hybrid solar, wind, and energy storage system for a sustainable campus: A simulation study**
Muller D, Selvanathan S, CÜCE E, Kumarasamy S.
SCIENCE AND TECHNOLOGY FOR ENERGY TRANSITION, vol.78, pp.1-12, 2023 (SCI-Expanded)
- LV. An experimental case study on the effect of condenser geometry in a refrigerator: Sub-cooling and coefficient of performance issues**
Borikar S. A., Borikar D. A., Panchal H., CÜCE E., DALKILIÇ A. S., Alrubaie A. J., Jaber M. M.
INTERNATIONAL JOURNAL OF REFRIGERATION, vol.148, pp.75-82, 2023 (SCI-Expanded)
- LVI. Characterization of biodiesel based on plastic pyrolysis oil (PPO) and coconut oil: Performance and emission analysis using RSM-ANN approach**
Afzal A, Roy R, Koshy C, Alex Y, Abbas M, CÜCE E, Razak R, Shaik S, Saleel C.
SUSTAINABLE ENERGY TECHNOLOGIES AND ASSESSMENTS, vol.56, pp.103046, 2023 (SCI-Expanded)
- LVII. Thermal insulation and mechanical properties of a specially improved insulation plaster under freezing-thawing and high-temperature conditions**
Ustabas I, CÜCE E.
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- LVIII. Detection, location, and diagnosis of different faults in large solar PV system-a review**
Venkatakrisnan G, Rengaraj R, Tamilselvi S, Harshini J, Sahoo A, Saleel C, Abbas M, CÜCE E, Jazlyn C, Shaik S, et al.
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- LIX. Dynamo script and a BIM-based process for measuring embodied carbon in buildings during the design phase**
Alzara M, Yosri A, Alruwaili A, CÜCE E, Eldin S, Ehab A.
INTERNATIONAL JOURNAL OF LOW-CARBON TECHNOLOGIES, vol.18, pp.943-955, 2023 (SCI-Expanded)
- LX. Experimental and theoretical examination of the energy performance and CO₂ emissions of room air conditioners utilizing natural refrigerant R290 as a substitute for R22**
Shaik S, Gorantla K, Shaik S, Afzal A, Rajhi A, CÜCE E.
JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, pp.8223-8241, 2023 (SCI-Expanded)
- LXI. Thermal sensitivity and potential cooling-related energy saving of masonry walls through the lens of**

solar heat-rejecting paints at varying orientations

Kontoleon K. J., Saboor S., Mazzeo D., Ahmad J., CÜCE E.

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- LXII. **Heat Transfer Studies on Solar Parabolic trough Collector Using Corrugated Tube Receiver with Conical Strip Inserts**
Venkatesaperumal R., Jafar K., Elumalai P., Abbas M., CÜCE E., Shaik S., Saleel C.
SUSTAINABILITY, vol.15, no.1, pp.378, 2023 (SCI-Expanded)
- LXIII. **Performance evaluation of using evacuated tubes solar collector, perforated fins, and pebbles in a solar still - experimental study and CO₂ mitigation analysis**
Panchal H., Sohani A., Van Nguyen N., Shoeibi S., Khiadani M., Huy P., Hoseinzadeh S., Kabeel A., Shaik S., Cuce E.
ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH, vol.30, no.5, pp.11769-11784, 2023 (SCI-Expanded)
- LXIV. **Weather Impact on Solar Farm Performance: A Comparative Analysis of Machine Learning Techniques**
Gopi A., Sharma P., Sudhakar K., Ngui W., Kirpichnikova I., CÜCE E.
SUSTAINABILITY, vol.15, no.1, pp.439, 2023 (SCI-Expanded)
- LXV. **Dependence of electrical power output on collector size in Manzanares solar chimney power plant: An investigation for thermodynamic limits**
Cüce E.
INTERNATIONAL JOURNAL OF LOW CARBON TECHNOLOGIES, vol.17, pp.1223-1231, 2022 (SCI-Expanded)
- LXVI. **Solar farm: Siting, design and land footprint analysis**
Sukumaran S., Sudhakar K., Yusop A. F., Kirpichnikova I., Cüce E.
INTERNATIONAL JOURNAL OF LOW CARBON TECHNOLOGIES, vol.17, pp.1478-1491, 2022 (SCI-Expanded)
- LXVII. **Optimization of performance and emission characteristics of the CI engine fueled with preheated palm oil in blends with diesel fuel**
Mohamed I. S., Venkatesan E. P., Parthasarathy M., Medapati S. R., Abbas M., Cüce E., Saboor S.
SUSTAINABILITY, vol.14, no.23, pp.15487, 2022 (SCI-Expanded)
- LXVIII. **Effect of using hybrid nanofluids as a coolant on the thermal performance of portable thermoelectric refrigerators**
MERT CÜCE A. P., CÜCE E., Guclu T., Shaik S., Alshahrani S., Saleel C. A.
SUSTAINABLE ENERGY TECHNOLOGIES AND ASSESSMENTS, vol.53, 2022 (SCI-Expanded)
- LXIX. **Experimental and parametric studies on the effect of waste cooking oil methyl ester with diesel fuel in compression ignition engine**
Rajak U., Singh T. S., Verma T. N., Chaurasiya P. K., Saboor S., Afzal A., Cüce E., Rajhi A. A., Saleel C. A.
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- LXX. **Heat storage and release performance of cascade phase change units for solar heating in a severe cold region of China**
Zhang L., Liu Z., Jin G., Cüce E., Jin J., Guo S.
ENERGIES, vol.15, no.19, pp.7421, 2022 (SCI-Expanded)
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Fourteenth International Conference on Sustainable Energy Technologies, Nottingham, United Kingdom, 25 - 27 August 2015, pp.625-633
- LXXIII. **Cooling applications with renewable energy powered resorption systems**
PASTAKKAYA B., CÜCE E., CÜCE P. M.
Fourteenth International Conference on Sustainable Energy Technologies, Nottingham, United Kingdom, 25 - 27 August 2015, pp.362
- LXXIV. **High Capacity Energy Efficiency Solar Glass**
YOUNG C., RIFFAT S., CÜCE E.
Fourteenth International Conference on Sustainable Energy Technologies, Nottingham, United Kingdom, 25 - 27 August 2015, pp.266-271
- LXXV. **Techno-economic assessment of heat insulation solar glass (HISG) for different climatic conditions: A case study for Beijing and London**
CÜCE E., DONG H., RIFFAT S.
Fourteenth International Conference on Sustainable Energy Technologies, Nottingham, United Kingdom, 25 - 27 August 2015, pp.1
- LXXVI. **An application of homotopy perturbation method for efficiency and effectiveness assessment of longitudinal porous fins**
CÜCE E., CÜCE P. M.
Fourteenth International Conference on Sustainable Energy Technologies, Nottingham, United Kingdom, 25 - 27

August 2015, pp.361

- LXXVII. **Experimental and numerical investigation of a novel energy-efficient window technology for low-carbon buildings: Vacuum tube window**
CÜCE E., RIFFAT S.
Thirteenth International Conference on Sustainable Energy Technologies, Geneva, Switzerland, 25 - 28 August 2014, pp.40126
- LXXVIII. **An overview of sectoral energy consumption in the UK: past, present and future**
CÜCE E., RIFFAT S.
Thirteenth International Conference on Sustainable Energy Technologies, Geneva, Switzerland, 25 - 28 August 2014, pp.40127
- LXXIX. **Innovative window technologies for low-carbon buildings**
CÜCE E.
Workshop on novel energy and biotechnology developments in the sustainable built environment, İstanbul, Turkey, 24 - 27 March 2014, pp.1
- LXXX. **Passive cooling of building-integrated photovoltaics (BIPVs) for better electrical performance**
CÜCE P. M., CÜCE E.
MEGS IV Annual Conference, Public Engagement with Energy, Loughborough, United Kingdom, 12 - 13 September 2013, pp.1
- LXXXI. **Tilt angle optimization of building-integrated photovoltaics (BIPVs) for cooler operating temperatures**
CÜCE E., CÜCE P. M.
MEGS IV Annual Conference, Public Engagement with Energy, Loughborough, United Kingdom, 12 - 13 September 2013, pp.1
- LXXXII. **Second law analysis of solar powered heat recovery panels in buildings**
CÜCE P. M., CÜCE E., RIFFAT S.
Twelfth International Conference on Sustainable Energy Technologies, Hong Kong, China, 26 - 29 August 2013, pp.1
- LXXXIII. **Theoretical investigation of solar powered heat recovery panels in buildings**
CÜCE P. M., CÜCE E., RIFFAT S.
Twelfth International Conference on Sustainable Energy Technologies, Hong Kong, China, 26 - 29 August 2013, pp.1
- LXXXIV. **Optimum insulation thickness of aerogel in buildings**
CÜCE E., CÜCE P. M., WOOD C. J., RIFFAT S.
Twelfth International Conference on Sustainable Energy Technologies, Hong Kong, China, 26 - 29 August 2013, pp.1
- LXXXV. **Aerogel with its outstanding features and building applications**
RIFFAT S., CÜCE E.
Eleventh International Conference on Sustainable Energy Technologies, Vancouver, Canada, 2 - 05 September 2012, pp.1
- LXXXVI. **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
- LXXXVII. **Effects of concavity level on heat loss, effectiveness and efficiency of a longitudinal fin exposed to natural convection and radiation**
CÜCE P. M., CÜCE E.
Tenth International Conference on Sustainable Energy Technologies, İstanbul, Turkey, 4 - 07 September 2011, pp.1
- LXXXVIII. **A review on performance analysis of photovoltaic/thermal collectors**
RIFFAT S., CÜCE E.
Tenth International Conference on Sustainable Energy Technologies, İstanbul, Turkey, 4 - 07 September 2011, pp.1
- LXXXIX. **Improving performance parameters of silicon solar cells using air cooling**

CÜCE E., BALI T.

Fifth International Ege Energy Symposium and Exhibition, Denizli, Turkey, 27 - 30 June 2010, pp.1-8

- XC. **Comparison of energy, power conversion and exergy efficiencies of monocrystalline silicon photovoltaic module at different illumination intensities and cell temperatures**

CÜCE E., BALI T.

17. Ulusal Isı Bilimi ve Teknigi Kongresi, Sivas, Turkey, 24 - 27 June 2009, pp.1-19

- XCI. **A comparison of energy and power conversion efficiencies of m-Si and p-Si PV cells in Trabzon**

CÜCE E., BALI T.

Fifth International Advanced Technologies Symposium, Karabük, Turkey, 13 - 15 May 2009, pp.1-5

- XCII. **Variation of cell parameters of a p-Si PV cell with different solar irradiances and cell temperatures in humid climates**

CÜCE E., BALI T.

Fourth International Exergy, Energy and Environment Symposium, Dubai, United Arab Emirates, 19 - 23 April 2009, pp.1-6

Supported Projects

Kar T., Cüce E., TUBITAK Project, Co-gasification of hazelnut shell-tea bush / lignite coal mixture and product analysis in fluid bed reactor, 2021 - 2023

CÜCE E., TUBITAK Project, Development of a novel, energy-efficient, eco-friendly and multi-functional glazing technology for low/zero carbon buildings: An experimental, numerical and statistical investigation, 2017 - 2019

CÜCE E., EU Supported Other Project, Innovative energy saving and climate control system for greenhouses, 2014 - 2016

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., EU Supported Other Project, High performance vacuum window, 2012 - 2014

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

CÜCE E., Other International Funding Programs, Thermodynamic analysis of the effectiveness of different types of PV modules for wet conditions, 2008 - 2009

Activities in Scientific Journals

JOURNAL OF ENERGY STORAGE, Special Issue Editor, 2023 - Continues

APPLIED ENERGY, Committee Member, 2022 - Continues

SUSTAINABLE ENERGY TECHNOLOGIES AND ASSESSMENTS, Special Issue Editor, 2022 - Continues

ENERGY AND BUILDINGS, Committee Member, 2022 - Continues

ENERGY AND BUILDINGS, Special Issue Editor, 2021 - Continues

GAZI JOURNAL OF ENGINEERING SCIENCES, Committee Member, 2021 - Continues

WORLD JOURNAL OF TEXTILE ENGINEERING AND TECHNOLOGY, Committee Member, 2021 - Continues

FUTURE CITIES AND ENVIRONMENT, Committee Member, 2020 - Continues

JOURNAL OF SOLAR ENERGY RESEARCH UPDATES, Committee Member, 2020 - Continues

GREEN BUILDING AND CONSTRUCTION ECONOMICS, First Editor, 2020 - Continues

ENERGY RESEARCH JOURNAL, Editor, 2016 - Continues

Metrics

Publication: 295

Citation (WoS): 5135
Citation (Scopus): 6271
H-Index (WoS): 40
H-Index (Scopus): 44

Congress and Symposium Activities

CSIR-CBRI International Experts Lecture Series, Invited Speaker, Haridwar, India, 2025
21st International Conference on Sustainable Energy Technologies, Invited Speaker, Shanghai, China, 2024
International Conference on Design, Materials and Manufacturing Engineering for Sustainable Development (ICDMMESD 2024), Invited Speaker, Dehra-Dun, India, 2024
The 6th International Conference on Alternative Fuels, Energy & Environment: Future and Challenges (ICAFEE 2023), Invited Speaker, Kayseri, Turkey, 2023
Renewable Energy Technologies for Sustainable Systems, Invited Speaker, Velluru, India, 2023
7th Session of Global Sustainability Lecture Series, Invited Speaker, Kuala-Lumpur, Malaysia, 2022
Third International Conference on Sustainable Energy Solutions for a Better Tomorrow, Invited Speaker, Chennai, India, 2022
Recent Advancements in Sustainable Energy Storage and Conversion, Invited Speaker, Karnataka, India, 2021
Energy Positive Buildings & Sustainable Transport Workshop organised by University of Exeter, UK and VIT, India, Invited Speaker, Exeter, United Kingdom, 2021
Novel Solar Energy Applications for the Built Environment, GIAN Programme Organised in Maulana Azad National Institute of Technology (MANIT), Bhopal, Invited Speaker, Bhopal, India, 2018
International Joint Conferences of International Conference on Industrial, Mechanical, Electrical, and Chemical Engineering (ICIMECE) & Annual Conference on Industrial and System Engineering (ACISE), Invited Speaker, Yogyakarta, Indonesia, 2016

Scholarships

Post-Doctorate Research Fellowship from TUBITAK (The Scientific and Technological Research Council of Turkey) through funding programme 2219/1, 2015, TUBITAK, 2015 - 2016
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, 2014 - 2016
Postgraduate Research Scholarship of Turkish Ministry of Education, Doctoral research in Sustainable Energy Technologies at the University of Nottingham, Ministry of Education, 2012 - 2015

Awards

Cüce E., Mert Cüce A. P., Guclu T., Besir A. B., Best Paper Award, Thermal Science, January 2023
Cüce E., Saxena A., Mert Cüce A. P., Sen H., Guo S., Sudhakar K., Best Paper Award, Oxford University Press, August 2022
Cüce E., TÜBA-Üstün Başarılı Genç Bilim İnsanı Ödülü (GEBİP), Türkiye Bilimler Akademisi, December 2021
CÜCE E., The Scientist of the Year Award - Yılın Bilim İnsanı Ödülü, Bilim Kahramanları Derneği, April 2018
CÜCE E., MERT CÜCE A. P., 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
CÜCE E., MERT CÜCE A. P., 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
CÜCE E., Scientific Publication Award – First Place. University of Bayburt, 2016, University of Bayburt, May 2016