

Prof. CAN ÖZGÜR ÇOLPAN



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Education Information

Doctorate, Carleton University, Makine Mühendisliği, Canada 2005 - 2009

Postgraduate, Middle East Technical University, Graduate School Of Natural And Applied Sciences, Makine Mühendisliği (YI) (Tezli), Turkey 2003 - 2005

Undergraduate, Middle East Technical University, Faculty Of Engineering, Makine Mühendisliği Bölümü, Turkey 1999 - 2003

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, Thermal Modeling of Solid Oxide Fuel Cell Based Biomass Gasification Systems, Carleton University, Makine Mühendisliği, 2009

Postgraduate, Exergy analysis of combined cycle cogeneration systems, Middle East Technical University, Fen Bilimleri Enstitüsü, Makine Mühendisliği (YI) (Tezli), 2005

Research Areas

Energy, Hydrogen Technologies and Fuel Cells

Academic Titles / Tasks

Professor, Dokuz Eylul University, Mühendislik Fakültesi, Makina Mühendisliği Bölümü, 2019 - Continues

Associate Professor, Dokuz Eylul University, Mühendislik Fakültesi, Makina Mühendisliği Bölümü, 2013 - 2019

Assistant Professor, Dokuz Eylul University, Mühendislik Fakültesi, Makina Mühendisliği Bölümü, 2012 - 2013

Academic and Administrative Experience

Uygulama ve Araştırma Merkezi Yönetim Kurulu Üyesi, Dokuz Eylül University, Mühendislik Fakültesi, Makina Mühendisliği Bölümü, 2021 - Continues

Deputy Director of the Center, Dokuz Eylül University, Mühendislik Fakültesi, Makina Mühendisliği Bölümü, 2021 - Continues

Courses

Thermodynamics-II, Undergraduate, 2013 - 2014, 2012 - 2013

Technical English-I, Undergraduate, 2013 - 2014

ISI TRANSFERİ, Undergraduate, 2013 - 2014

MAKİNA MÜHENDİSLİĞİNDE ÖLÇÜM VE ANALİZ LAB., Undergraduate, 2013 - 2014, 2012 - 2013

Fluid Mechanics, Undergraduate, 2013 - 2014, 2012 - 2013

Thermodynamics-I, Undergraduate, 2013 - 2014, 2012 - 2013

TERMODİNAMİĞE GİRİŞ, Undergraduate, 2012 - 2013

Advising Theses

ÇOLPAN C. Ö., AYOL A., Bütünleşik biyokütle gazlaştırma ve katı oksit yakıt pili sistemlerinin performans, ekonomik ve çevresel analizleri, Postgraduate, B.DURSUN(Student), 2022

ÇOLPAN C. Ö., Membran reaktörde biyogazdan hidrojen üretimi, Doctorate, Y.NALBANT(Student), 2022

ÇOLPAN C. Ö., Konut uygulamaları için katı oksit yakıt piline dayalı mikro kojenerasyon sisteminin matematiksel modellenmesi, Postgraduate, M.ATILMIŞ(Student), 2022

ÇOLPAN C. Ö., Katı oksit yakıt pilinin modellenmesi ve biyokütle gazlaştırma sistemi ile entegrasyonu, Doctorate, A.ERDOĞAN(Student), 2022

ÇOLPAN C. Ö., ÇOLPAN C., Kompozit malzemelere dayalı bir yakıt pilinin modelleme ve deneysel çalışmalarla geliştirilmesi, Doctorate, G.UMUR(Student), 2021

ÇOLPAN C. Ö., Katı hidrojen depolama malzemelerinin katalitik dehidrojenlenmesi yoluyla hidrojen üretiminin modellenmesi ve deneysel incelenmesi, Doctorate, C.ALPAYDIN(Student), 2021

ÇOLPAN C. Ö., Development of High Performance Electrochemical Hydrogen Compressor Through Theoretical and Experimental Studies, Doctorate, G.NUR(Student), 2020

ÇOLPAN C. Ö., Biyokütle ve güneş kaynaklı organik rankine çevriminin ısıl ve ekonomik analizi, Doctorate, Ö.ÇALLI(Student), 2019

ÇOLPAN C. Ö., Doğrudan alkollü yakıt pilleri için yenilikçi katalizör sentezi, Postgraduate, E.BARIŞ(Student), 2019

ÇOLPAN C. Ö., Doğrudan metanollü yakıt pillerinin sistem-düzeyi modellenmesi ve simülasyonu, Postgraduate, A.CAN(Student), 2019

ÇOLPAN C. Ö., PEM yakıt hücresi-lityum polimer batarya hibrit sistemiyle tahrikli mini-İHA üretimi ve enerji yönetim sisteminin modellenmesi, Doctorate, G.YALIN(Student), 2019

ÇOLPAN C. Ö., İnsansız hava araçlarında farklı yakıtlar ile çalışan turbojet motorunun enerji, ekserji ve sürdürülebilirlik analizleri, Doctorate, K.ÇOBAN(Student), 2018

ÇOLPAN C. Ö., Yüksek sıcaklıkta çalışan proton değişim membranlı yakıt piline dayalı kojenerasyon sistemlerinin modellenmesi ve simülasyonu, Postgraduate, Y.NALBANT(Student), 2018

ÇOLPAN C. Ö., Thermal modeling of the system consisting of human skin and firefighter clothing, Postgraduate, D.YILMAZ(Student), 2018

ÇOLPAN C. Ö., Akan elektrolitli doğrudan metanollü yakıt pilinin üç boyutlu iki fazlı modellenmesi, Postgraduate, Ö.FARUK(Student), 2017

ÇOLPAN C. Ö., Sınır tabakası türbülansının direkt sayısal simülasyonu, Postgraduate, G.YAŞAL(Student), 2017

ÇOLPAN C. Ö., Alternatif malzemelere dayalı doğrudan metanollü yakıt pili üretimi ve test edilmesi, Postgraduate,

M.ERÇELİK(Student), 2017

ÇOLPAN C. Ö., Farklı akış kanalına dayalı akan elektrolitli doğrudan metanol yakıt pilinin matematiksel modellenmesi, Postgraduate, U.GENÇALP(Student), 2017

ÇOLPAN C. Ö., Organik Rankin çevrimlerinde kullanılan gövde boru tipi ısı değiştiricilerinin ısı tasarımı ve optimizasyonu, Postgraduate, A.ERDOĞAN(Student), 2017

ÇOLPAN C. Ö., Three dimensional mathematical modeling of a direct methanol fuel cell, Postgraduate, E.EREY(Student), 2016

ÇOLPAN C. Ö., Parabolik oluklu güneş kolektörleri ile bütünleştirilmiş jeotermal kaynaklı organik rankin çevriminin ısı modellenmesi, Postgraduate, D.MELEK(Student), 2016

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Dynamic analysis and multi-objective optimization of solar and hydrogen energy-based systems for residential applications: A review**
Soyturk G., Cetinkaya S. A., Aslani Yekta M., Kheiri Joghhan M. M., Mohebi H., Kizilkan O., Ghandehariun A. M., ÇOLPAN C. Ö., Acar C., Ghandehariun S.
International Journal of Hydrogen Energy, vol.75, pp.662-689, 2024 (SCI-Expanded)
- II. **Design, modeling, and analysis of a PV/T and PEM fuel cell based hybrid energy system for an off-grid house**
Soyturk G., Kizilkan O., EZAN M. A., ÇOLPAN C. Ö.
International Journal of Hydrogen Energy, vol.67, pp.1181-1193, 2024 (SCI-Expanded)
- III. **Assessment of polybenzimidazole/MOF composite membranes for the improvement of high-temperature PEM fuel cell performance**
Devrim Y., ÇOLPAN C. Ö.
International Journal of Hydrogen Energy, vol.58, pp.470-478, 2024 (SCI-Expanded)
- IV. **Numerical investigations on the absorption of a metal hydride hydrogen storage tank based on various thermal management strategies**
Disli T., Çetinkaya S. A., Ezan M. A., Colpan C. Ö.
International Journal of Hydrogen Energy, vol.51, pp.504-522, 2024 (SCI-Expanded)
- V. **Experimental and modeling studies of a high-temperature electrochemical hydrogen compressor**
Bulanık Durmuş G. N., Kuzu C., Devrim Y., ÇOLPAN C. Ö.
International Journal of Hydrogen Energy, vol.51, pp.290-301, 2024 (SCI-Expanded)
- VI. **Comparison of various metaheuristic algorithms to extract the optimal PEMFC modeling parameters**
Korkmaz S. A., Çetinkaya S. A., Yuksel O., Konur O., Erginer K. E., Çolpan C. Ö.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.51, no.D, pp.1402-1420, 2024 (SCI-Expanded)
- VII. **Investigation of drive cycle simulation performance for electric, hybrid, and fuel cell powertrains of a small-sized vehicle**
Alpaslan E., Karaoğlan M. U., Çolpan C. Ö.
International Journal of Hydrogen Energy, vol.48, no.99, pp.39497-39513, 2023 (SCI-Expanded)
- VIII. **Sizing of a solar and hydrogen-based integrated energy system of a stand-alone house in Izmir**
Soyturk G., Kizilkan O., EZAN M. A., ÇOLPAN C. Ö.
International Journal of Hydrogen Energy, vol.48, no.99, pp.39182-39196, 2023 (SCI-Expanded)
- IX. **Performance analysis of a gas-to-power system based on protonic-ceramic electrochemical compressor**
Baniyadi E., Ghojavand F., ÇOLPAN C. Ö., Devrim Y.
International Journal of Hydrogen Energy, vol.48, no.94, pp.36836-36848, 2023 (SCI-Expanded)
- X. **PVT integrated hydrogen production with small-scale transcritical power cycle**
Soyturk G., Kizilkan O., EZAN M. A., ÇOLPAN C. Ö.
PROCESS SAFETY AND ENVIRONMENTAL PROTECTION, vol.180, pp.351-360, 2023 (SCI-Expanded)
- XI. **Analysis of reformat syngas mixture fed solid oxide fuel cell through experimental and 0-D**

thermodynamic modeling studies

Erdogan A., Capotondo F., Ince A. C., Hagen A., ÇOLPAN C. Ö.

International Journal of Hydrogen Energy, vol.48, no.60, pp.23110-23126, 2023 (SCI-Expanded)

- XII. **Environmental and economic analyses of fuel cell and battery-based hybrid systems utilized as auxiliary power units on a chemical tanker vessel**
Korkmaz S. A., Erginer K. E., Yuksel O., Konur O., Çolpan C. Ö.
International Journal of Hydrogen Energy, vol.48, no.60, pp.23279-23295, 2023 (SCI-Expanded)
- XIII. **High-temperature electrochemical hydrogen separation from reformat gases using PBI/MOF composite membrane**
Bulanık Durmuş G. N., Eren E. O., Devrim Y., ÇOLPAN C. Ö., ÖZKAN N.
International Journal of Hydrogen Energy, vol.48, no.60, pp.23044-23054, 2023 (SCI-Expanded)
- XIV. **A mini review on mathematical modeling of co-electrolysis at cell, stack and system levels**
Ince A. C., Serincan M. F., ÇOLPAN C. Ö., Pasaogullari U.
Fuel Processing Technology, vol.244, 2023 (SCI-Expanded)
- XV. **Guest editorial: The significance of clean and energy-efficient operations in sustainable aviation**
Karakoç T. H., ÇOLPAN C. Ö., YETİK Ö., DALKIRAN A.
Aircraft Engineering and Aerospace Technology, vol.95, no.3, pp.365, 2023 (SCI-Expanded)
- XVI. **Scaling and performance assessment of power-to-methane system based on an operation scenario**
Ince A. C., Ozgur Colpan C. Ö., Keles A., Serincan M. F., Pasaogullari U.
FUEL, vol.332, 2023 (SCI-Expanded)
- XVII. **A Review on Thermal Coupling of Metal Hydride Storage Tanks with Fuel Cells and Electrolyzers**
Cetinkaya S. A., Disli T., Soy Turk G., Kizilkan O., ÇOLPAN C. Ö.
Energies, vol.16, no.1, 2023 (SCI-Expanded)
- XVIII. **Operation-dependent exergetic sustainability assessment and environmental analysis on a large tanker ship utilizing Organic Rankine cycle system**
Konur O., Yuksel O., Aykut Korkmaz S. A., Ozgur Colpan C. Ö., Saatçioğlu Ö. Y., Koseoglu B.
ENERGY, vol.262, 2023 (SCI-Expanded)
- XIX. **Reducing the fuel consumption and emissions with the use of an external fuel cell hybrid power unit for electric taxiing at airports**
Kececi M., ÇOLPAN C. Ö., Karakoc T. H.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.47, no.95, pp.40502-40512, 2022 (SCI-Expanded)
- XX. **A review on performance, economic, and environmental analyses of integrated solid oxide fuel cell and biomass gasification systems**
Erdogan A., Dursun B., ÇOLPAN C. Ö., AYOL A.
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, vol.44, no.4, pp.8403-8426, 2022 (SCI-Expanded)
- XXI. **Energy and exergy analyses of an integrated membrane reactor and CO₂ capture system to generate decarbonized hydrogen**
Çolpan C. Ö., Nalbant Atak Y., Iulianelli A.
ENERGY CONVERSION AND MANAGEMENT, pp.1-13, 2022 (SCI-Expanded)
- XXII. **Thermal design and analysis of an organic rankine cycle system utilizing the main engine and cargo oil pump turbine based waste heats in a large tanker ship**
Konur O., Yuksel O., Korkmaz S. A., Çolpan C. Ö., Saatçioğlu Ö. Y., Muslu I.
JOURNAL OF CLEANER PRODUCTION, vol.368, 2022 (SCI-Expanded)
- XXIII. **EDITORIAL: Global warming reduction by hydrogen**
Nizetic S., ÇOLPAN C. Ö.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.47, no.74, pp.31729, 2022 (SCI-Expanded)
- XXIV. **Performance of a microjet using component map scaling**
Coban K., Ekici S., ÇOLPAN C. Ö., Karakoc T. H.
AIRCRAFT ENGINEERING AND AEROSPACE TECHNOLOGY, vol.94, no.8, pp.1201-1219, 2022 (SCI-Expanded)
- XXV. **Mathematical modeling of a direct dimethyl ether fuel cell**

- Alpaydin G. U., Durmus G. N. B., ÇOLPAN C. Ö., DEVRİM Y.
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.46, no.9, pp.11989-12002, 2022 (SCI-Expanded)
- XXVI. **A comprehensive review on organic Rankine cycle systems used as waste heat recovery technologies for marine applications**
Konur O., Colpan C. Ö., Saaticioglu Ö. Y.
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, vol.44, no.2, pp.4083-4122, 2022 (SCI-Expanded)
- XXVII. **Investigation of the performance of high-temperature electrochemical hydrogen purification from reformate gases**
Durmus G. N. B., ÇOLPAN C. Ö., DEVRİM Y.
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.46, no.8, pp.11443-11455, 2022 (SCI-Expanded)
- XXVIII. **Promising fuels and green energy technologies for aviation**
Karakoc T. H., ÇOLPAN C. Ö., Ekici S., YETİK Ö.
INTERNATIONAL JOURNAL OF GREEN ENERGY, 2022 (SCI-Expanded)
- XXIX. **Local entropy generation and exergy analysis of the condenser in a direct methanol fuel cell system**
Ince A. C., SERİNCAN M. F., ÇOLPAN C. Ö.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.47, no.45, pp.19850-19864, 2022 (SCI-Expanded)
- XXX. **Biomass gasification for sustainable energy production: A review**
Tezer O., Karabag N., Ongen A., ÇOLPAN C. Ö., AYOL A.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.47, no.34, pp.15419-15433, 2022 (SCI-Expanded)
- XXXI. **A review on mathematical modeling of packed bed membrane reactors for hydrogen production from methane**
Atak Y. N., ÇOLPAN C. Ö., Iulianelli A.
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.45, no.15, pp.20601-20633, 2021 (SCI-Expanded)
- XXXII. **A Comparison of the Effects of Sodium Borohydride-Based Hydrogen Storage System and Compressed Hydrogen Storage Tank on the Fuel Cell Vehicle Performance**
Alpaydin C. Y., ÇOLPAN C. Ö., KARAOĞLAN M. U., KARAHAN GÜLBAY S.
JOURNAL OF ENERGY RESOURCES TECHNOLOGY-TRANSACTIONS OF THE ASME, vol.143, no.12, 2021 (SCI-Expanded)
- XXXIII. **Modeling and simulation of Power-to-X systems: A review**
Ince A. C., ÇOLPAN C. Ö., Hagen A., Serincan M. F.
Fuel, vol.304, 2021 (SCI-Expanded)
- XXXIV. **A review on fuel cell electric vehicle powertrain modeling and simulation**
Alpaslan E., Cetinkaya S. A., Alpaydin C. Y., Korkmaz S. A., Karaoğlan M. U., Çolpan C. Ö., Erginer K. E., Gören A.
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, 2021 (SCI-Expanded)
- XXXV. **Advances in sustainable aviation**
Karakoc T. H., ÇOLPAN C. Ö., Koruyucu E.
AIRCRAFT ENGINEERING AND AEROSPACE TECHNOLOGY, vol.93, no.8, pp.1277, 2021 (SCI-Expanded)
- XXXVI. **Thermoeconomic analysis of a biomass and solar energy based organic Rankine cycle system under part load behavior**
Calli O., ÇOLPAN C. Ö., GÜNERHAN H.
SUSTAINABLE ENERGY TECHNOLOGIES AND ASSESSMENTS, vol.46, 2021 (SCI-Expanded)
- XXXVII. **Sustainable H-2 generation via steam reforming of biogas in membrane reactors: H2S effects on membrane performance and catalytic activity**
Iulianelli A., Manisco M., Bion N., Le Valant A., Epron F., Colpan C. Ö., Esposito E., Jansen J. C., Gensini M., Caravella A.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.46, no.57, pp.29183-29197, 2021 (SCI-Expanded)
- XXXVIII. **A review on the development of the electrochemical hydrogen compressors**
Durmus G. N. B., ÇOLPAN C. Ö., DEVRİM Y.
JOURNAL OF POWER SOURCES, vol.494, 2021 (SCI-Expanded)
- XXXIX. **Architecture design and performance analysis of a hybrid hydrogen fuel cell system for unmanned aerial vehicle**

Ozbek E., YALIN G., KARAOĞLAN M. U., Ekici S., ÇOLPAN C. Ö., Karakoc T. H.

INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.46, no.30, pp.16453-16464, 2021 (SCI-Expanded)

- XL. **Comparison of single-cell testing, short-stack testing and mathematical modeling methods for a direct methanol fuel cell**
KARAOĞLAN M. U., Ince A. C., Glusen A., ÇOLPAN C. Ö., Mueller M., Stolten D., Kuralay N. S.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.46, no.6, pp.4844-4856, 2021 (SCI-Expanded)
- XLI. **Production of poly(vinyl alcohol)/Nafion (R) nanofibers and their stability assessment for the use in direct methanol fuel cells**
Zizhou R. E., ÇAY A., AKÇAKOCA KUMBASAR E. P., ÇOLPAN C. Ö.
JOURNAL OF INDUSTRIAL TEXTILES, vol.50, no.6, pp.773-793, 2021 (SCI-Expanded)
- XLII. **A study on determination of component sizing capacity for range performance, cost and CO₂ production of an extended-range electric vehicle**
KARAOĞLAN M. U., Kuralay N. S., ÇOLPAN C. Ö.
INTERNATIONAL JOURNAL OF GLOBAL WARMING, vol.24, pp.326-341, 2021 (SCI-Expanded)
- XLIII. **A pseudo two-phase model to study effects of non-condensable gases on the water autonomy of a direct methanol fuel cell system**
Ince A. C., SERİNCAN M. F., ÇOLPAN C. Ö.
INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER, vol.163, 2020 (SCI-Expanded)
- XLIV. **Heat exchanger network design of an organic Rankine cycle integrated waste heat recovery system of a marine vessel using pinch point analysis**
Konur O., Saatçioğlu Ö. Y., Korkmaz S. A., Erdogan A., Çolpan C. Ö.
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.44, no.15, pp.12312-12328, 2020 (SCI-Expanded)
- XLV. **Thermodynamic analysis of a supercritical closed Brayton cycle integrated with parabolic trough solar collectors**
Erdogan A., Kizilkan O., ÇOLPAN C. Ö.
JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, vol.141, no.1, pp.231-244, 2020 (SCI-Expanded)
- XLVI. **Coupled computational fluid dynamics-response surface methodology to optimize direct methanol fuel cell performance for greener energy generation**
Sharifi S., Rahimi R., Mohebbi-Kalhari D., ÇOLPAN C. Ö.
ENERGY, vol.198, 2020 (SCI-Expanded)
- XLVII. **Preface to special issue on hydrogen energy technologies for mitigating global warming**
ÇOLPAN C. Ö., EZAN M. A.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.45, no.5, pp.3395, 2020 (SCI-Expanded)
- XLVIII. **Energy and exergy performance assessments of a high temperature-proton exchange membrane fuel cell based integrated cogeneration system**
Nalbant Y., ÇOLPAN C. Ö., DEVRİM Y.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.45, no.5, pp.3584-3594, 2020 (SCI-Expanded)
- XLIX. **A review on the catalysts used for hydrogen production from ammonia borane**
Alpaydin C. Y., KARAHAN GÜLBAY S., ÇOLPAN C. Ö.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.45, no.5, pp.3414-3434, 2020 (SCI-Expanded)
- L. **Simulation of a hybrid vehicle powertrain having direct methanol fuel cell system through a semi-theoretical approach**
KARAOĞLAN M. U., Ince A. C., ÇOLPAN C. Ö., Glusen A., Kuralay N. S., Mueller M., Stolten D.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.44, no.34, pp.18981-18992, 2019 (SCI-Expanded)
- LI. **Semiempirical thermodynamic modeling of a direct methanol fuel cell system**
Ince A. C., KARAOĞLAN M. U., Glusen A., ÇOLPAN C. Ö., Mueller M., Stolten D.
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.43, no.8, pp.3601-3615, 2019 (SCI-Expanded)
- LII. **Performance of an HT-PEMFC having a catalyst with graphene and multiwalled carbon nanotube support**
Alpaydin G. U., DEVRİM Y., ÇOLPAN C. Ö.
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.43, no.8, pp.3578-3589, 2019 (SCI-Expanded)

- LIII. **Performance assessment of a marine freshwater generator through exergetic optimization**
Yüksel O., Gulmez Y., Konur O., Korkmaz S. A., Erdogan A., Çolpan C. Ö.
JOURNAL OF CLEANER PRODUCTION, vol.219, pp.326-335, 2019 (SCI-Expanded)
- LIV. **The effect of gear ratios on the exhaust emissions and fuel consumption of a parallel hybrid vehicle powertrain**
KARAOĞLAN M. U., Kuralay N. S., ÇOLPAN C. Ö.
JOURNAL OF CLEANER PRODUCTION, vol.210, pp.1033-1041, 2019 (SCI-Expanded)
- LV. **Energy, exergy and exergoeconomic analyses of a solar refrigeration cycle using nanofluid**
Asgharian H., Baniasadi E., ÇOLPAN C. Ö.
INTERNATIONAL JOURNAL OF EXERGY, vol.30, no.1, pp.63-85, 2019 (SCI-Expanded)
- LVI. **Energy, exergy and thermoeconomic analyses of biomass and solar powered organic Rankine cycles**
Calli O., ÇOLPAN C. Ö., GÜNERHAN H.
INTERNATIONAL JOURNAL OF EXERGY, vol.29, pp.172-192, 2019 (SCI-Expanded)
- LVII. **Investigation of the effects of battery types and power management algorithms on drive cycle simulation for a range-extended electric vehicle powertrain**
KARAOĞLAN M. U., Kuralay N. S., ÇOLPAN C. Ö.
INTERNATIONAL JOURNAL OF GREEN ENERGY, vol.16, no.1, pp.1-11, 2019 (SCI-Expanded)
- LVIII. **Special Issue on: Energy and Environmental Friendly Applications**
ÇOLPAN C. Ö., EZAN M. A.
INTERNATIONAL JOURNAL OF GLOBAL WARMING, vol.19, pp.1-2, 2019 (SCI-Expanded)
- LIX. **Development of a one-dimensional and semi-empirical model for a high temperature proton exchange membrane fuel cell**
Nalbant Y., ÇOLPAN C. Ö., DEVRİM Y.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.43, no.11, pp.5939-5950, 2018 (SCI-Expanded)
- LX. **Three dimensional modeling of a FE-DMFC short-stack**
ÇOLPAN C. Ö., Ouellette D.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.43, no.11, pp.5951-5960, 2018 (SCI-Expanded)
- LXI. **PERFORMANCE ASSESSMENT OF SHELL AND TUBE HEAT EXCHANGER BASED SUBCRITICAL AND SUPERCRITICAL ORGANIC RANKINE CYCLES**
Erdogan A., ÇOLPAN C. Ö.
THERMAL SCIENCE, vol.22, 2018 (SCI-Expanded)
- LXII. **Assessment of different bio-inspired flow fields for direct methanol fuel cells through 3D modeling and experimental studies**
Ouellette D., Ozden A., Ercelik M., ÇOLPAN C. Ö., GANJEHSARABI H., Li X., Hamdullahpur F.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.43, no.2, pp.1152-1170, 2018 (SCI-Expanded)
- LXIII. **Evaluation of sulfonated polysulfone/zirconium hydrogen phosphate composite membranes for direct methanol fuel cells**
Ozden A., Ercelik M., DEVRİM Y., ÇOLPAN C. Ö., Hamdullahpur F.
ELECTROCHIMICA ACTA, vol.256, pp.196-210, 2017 (SCI-Expanded)
- LXIV. **Application of thermodynamic laws on a military helicopter engine**
Coban K., ÇOLPAN C. Ö., KARAKOÇ T. H.
ENERGY, vol.140, pp.1427-1436, 2017 (SCI-Expanded)
- LXV. **Exergetic and exergoeconomic assessment of a small-scale turbojet fuelled with biodiesel**
Coban K., ŞÖHRET Y., ÇOLPAN C. Ö., KARAKOÇ T. H.
ENERGY, vol.140, pp.1358-1367, 2017 (SCI-Expanded)
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- XLV. **Exergetic Optimization of a Parabolic Trough Solar Collector**
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Supported Projects

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AYOL A., Demiral Y. O., ÇOLPAN C. Ö., Project Supported by Higher Education Institutions, Zeytinyağı Üretimi Atıklarının Biyoyataklarla ve Biyoyataklara Entegre Edilmiş Mikrobiyal Yakıt Hücreleri ile Sürdürülebilir Arıtımı Zeytin Endüstrisi için bir Döngüsel Ekonomi Yaklaşımının Geliştirilmesi, 2022 - Continues

ÇOLPAN C. Ö., Tural K., YÜKSEL ALPAYDIN C., Çetinkaya S. A., Alpaslan E., KORKMAZ S. A., KEMALOĞLU (Yüksek Lisans Bursiyeri) Z., KONUR O., GÖREN A., KARAOĞLAN M. U., et al, Project Supported by Higher Education Institutions, Yakıt Pili Seri-Hibrit Kara ve Deniz Araçlarının Enerji Depolama ve Üretim Sistem Parametrelerinin Optimizasyonu ve Prototip Araçların Geliştirilmesi, 2020 - 2024

Çolpan C. Ö., Ezan M. A., Acar C., Kızıllan Ö., TUBITAK Project, Şebekeden Bağımsız Uygulamalar İçin Güneş ve Hidrojen Enerjisi Bazlı Elektrik ve Sıcak Su Üretim Sisteminin Çok-Amaçlı Optimizasyonu, 2021 - 2023

Çay A., Çolpan C. Ö., Akduman Ç., Akçakoca Kumbasar E. P., Ertaş H., Morsümbül S., Project Supported by Higher Education Institutions, Nanofibrous Composite Membranes for Fuel Cells, 2020 - 2023

Çolpan C. Ö., Devrim Y., TUBITAK Project, Yüksek Safılıkta Ve Basıncıta Hidrojen Eldesi İçin Yüksek Sıcaklık Elektrokimyasal Hidrojen Kompresörü Geliştirilmesi, 2020 - 2022

Ayol A., Çolpan C. Ö., Öngen A., TUBITAK Project, Aritma Çamuru, Yeşil Atıklar Ve Pirinadan Gazlaştırma Prosesi Ile Sürdürülebilir Enerji Geri Kazanımı: Gazlaştırma Ürünlerinin Farklı Yararlı Kullanım Alternatiflerinin Araştırılması, 2020 - 2022

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Bayram A., Dölgen D., Alpaslan M. N., Kırkulak Uludağ B., Çolpan C. Ö., Tamer Ö., Şenyay Öncel D., Development Agency, Yeşil OSB için Çevresel Kriterlerin Firma Bazlı Analizi ve Yol Haritası, 2020 - 2021

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ÇOLPAN C. Ö., Project Supported by Higher Education Institutions, YÜKSEK PERFORMANSLI DOĞRUDAN METANOL YAKIT PİLİ YIĞINI TASARIMI, ÜRETİMİ, VE DENEYSEL İNCELENMESİ, 2013 - 2015

Activities in Scientific Journals

e-Prime, Committee Member, 2021 - Continues

Memberships / Tasks in Scientific Organizations

Hidrojen Teknolojileri Derneği, Secretary General, 2021 - Continues, Turkey

Metrics

Publication: 177

Citation (WoS): 1843

Citation (Scopus): 1834

H-Index (WoS): 25

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Congress and Symposium Activities

19TH ERASMUS CONGRESS AND EXHIBITION, Attendee, Rome, Italy, 2023

Awards

Çolpan C. Ö., Araştırma Teşvik Ödülü, Odtü Parlar Vakfı, December 2019

Çolpan C. Ö., TÜBA-GEBİP, Tüba, December 2019