Res. Asst. AHMET SERHAN HERGÜL

Personal Information

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International Researcher IDs
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Education Information

Postgraduate, Kocaeli University, Fen Bilimleri Enstitüsü, Enerji Sistemleri Mühendisliği (Yl), Turkey 2014 - 2016
Undergraduate, Yalova University, Faculty Of Engıneerıng, Department Of Energy Systems Engıneerıng, Turkey 2009 - 2014

Dissertations

Postgraduate, Trijenerasyon sistemlerinin enerji, ekonomik ve çevresel analizi, Kocaeli Üniversitesi, Fen Bilimleri Enstitüsü, Enerji Sistemleri Mühendisliği (Yl), 2016

Research Areas

Energy, Conventional Energy Systems and Their Technology, Alternative Energy Resources, Solar energy, Advanced Energy Technologies

Academic Titles / Tasks

Research Assistant, Kocaeli University, Teknoloji Fakültesi, Enerji Sistemleri Mühendisliği, 2014 - Continues

Courses

Yakıtlar ve Yanma Laboratuvarı, Undergraduate, 2022 - 2023
Güç Elektroniği Laboratuvarı, Undergraduate, 2022 - 2023
Tasarım ve Optimizasyon, Undergraduate, 2022 - 2023
Programlanabilir Mantık Denetleyicileri , Undergraduate, 2022 - 2023
Ölçme ve Enstrumentasyon Laboratuvarı, Undergraduate, 2022 - 2023
Elektrik Devreleri 2 Laboratuvarı, Undergraduate, 2022 - 2023
İmalat İşlemleri Laboratuvarı, Undergraduate, 2022 - 2023
Power Electronics Lab, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019
Yenilenebilir Enerjiler için Tasarım ve Model Uygulamaları Lab, Undergraduate, 2021 - 2022
Elektrik Devreleri 1 Laboratuvarı, Undergraduate, 2022 - 2023

Elektronik Laboratuvarı, Undergraduate, 2022 - 2023
ELEKTRİK DEVRELERİ II LABORATUVARI, Undergraduate, 2021 - 2022, 2020 - 2021
Bilgisayar Destekli Teknik Resim Laboratuvarı, Undergraduate, 2022 - 2023
Elektronik Laboratuvarı, Undergraduate, 2020 - 2021
ELEKTRONİK LABORATUVARI, Undergraduate, 2019 - 2020
ELEKTRİK DEVRELERİ - II LABORATUVARI, Undergraduate, 2019 - 2020

Published journal articles indexed by SCI, SSCI, and AHCI

I. **Investigation on aluminum alloys as winding materials for alternators in wind turbines**
HERGÜL A. S., YÜCE M., AYAZ M., Mese E.
EMERGING MATERIALS RESEARCH, vol.9, no.3, pp.789-795, 2020 (SCI-Expanded)
II. **Comparative study on winding materials for wind turbine alternators**
AYAZ M., TAŞDEMİRCİ E., YÜCE M., Mese E., HERGÜL A. S.
EMERGING MATERIALS RESEARCH, vol.9, no.2, pp.360-365, 2020 (SCI-Expanded)
III. **Band gap engineering and modifying surface of TiO2 nanostructures by Fe2O3 for enhanced-performance of dye sensitized solar cell**
Kiliç B., Gedik N., Mucur S. P., Hergul A. S., GÜR E.
Materials Science in Semiconductor Processing, vol.31, no.1, pp.363-371, 2015 (SCI-Expanded)

Articles Published in Other Journals

I. **AN ENERGY AUDIT AND OPTIMIZATION IN BAR MILL ANNEALING FURNACE**
Hadra M., Hergül A. S., Kaya D., Eyidoğan M., Çanka Kılıç F., Özdemir N. C.
International Journal of Ecosystems and Ecology Science-IJEES, vol.9, pp.33-42, 2019 (ESCI)
II. **Investigation of District Heating System by Utilizing Waste Heat Sources of a Biogas Power Plant**
HERGÜL A. S., YÜCE M., ÖZDEMİR N. C., KAYA D.
Journal of International Environmental Application Science, vol.12, pp.264-269, 2017 (Peer-Reviewed Journal)
III. **ENERGY, ENVIRONMENT AND ECONOMIC ANALYSIS OF DESIGNED TRIGENERATION SYSTEM**
HERGÜL A. S., KAYA D., ÇOBAN V.
INTERNATIONAL JOURNAL OF ECOSYSTEMS AND ECOLOGY SCIENCE-IJEES, vol.6, no.4, pp.575-580, 2016 (ESCI)

Refereed Congress / Symposium Publications in Proceedings

I. **An Energy Audit and Optimization in Bar Mill Annealing Furnace**
HADRA M., HERGÜL A. S., KAYA D., EYİDOĞAN M., ÇANKA KILIÇ F., ÖZDEMİR N. C.
International Conference of Ecosystems (ICE2018), Illinois, United States Of America, 22 - 25 June 2018, pp.103-113
II. **DESIGNING A DISTRICT HEATING SYSTEM BY DETERMINING THE WASTEHEAT OF A BIOGAS POWER PLANT**
HERGÜL A. S., YÜCE M., KAYA D.
UEMK 2017, 12 - 13 October 2017, vol.1, pp.534
III. **A Sample Combined Heat and Power System fort he Residental and Light Commercial Applications**
YÜCE M., HERGÜL A. S., KAYA D.
ICCESEN 2017, 4 - 08 October 2017, vol.1, pp.245
IV. **Comperative Study on Winding Materials For Wind Turbine Alternators**
AYAZ M., TAŞDEMİRCİ E., YÜCE M., MEŞE E., HERGÜL A. S.
ICCESEN 2017, 4 - 08 October 2017, vol.1, pp.639

V. **Investigation on Winding Materials Selection for Synchronous Alternators Used in Wind Turbines**
HERGÜL A. S., YÜCE M., AYAZ M., TAŞDEMİRCİ E., MEŞE E.
ICCESEN 2017, 4 - 08 October 2017, vol.1, pp.640

VI. **Electrostatic Powder Coating Plant Conveyor System and Energy Efficiency**
taskan d., HERGÜL A. S., ÇOBAN V., KAYA D.
3rd Iron and Steel Symposium(UDCS'17), Turkey, 3 - 05 April 2017

VII. **Energy Efficiency Increasing and Emission Reduction Opportunities in Compressed Air Systems**
SAPMAZ S., KAYA D., HERGÜL A. S.
ICOCEE 2017, Nevşehir, Turkey, 8 - 10 May 2017, vol.1, pp.2816-2829

VIII. **A Model Application In A Collective Settlement Area Within the TS 825 Standard In Terms of Energy Efficiency**
YÜCE M., HERGÜL A. S.
SolarTR 2016, İstanbul, Turkey, 6 - 08 December 2016

IX. **Determination of Energy Efficiency and Emissions Savings of a Public Building by Thermal Insulation**
HERGÜL A. S., YÜCE M.
SolarTR 2016, İstanbul, Turkey, 6 - 08 December 2016

X. **WIND POWER ASSISTED ELECTROLYSIS SYSTEM UNDER VARYING SOLAR RADIATION**
HERGÜL A. S.
SOLAR CONFERENCE and EXHIBITION, İstanbul, Turkey, 6 - 08 December 2016, vol.1, pp.87-91

XI. **Solar Assisted Heating System Design and Performance Evaluation in Terms of Energy and Economical Aspects**
YÜCE M., HERGÜL A. S., KAYA D.
1st International Mediterranean Science and Engineering Congress (IMSEC 2016), Adana, Turkey, 26 - 28 October 2016

XII. **ANAYLYSIS OF A TRIGENERATION SYSTEM IN TERMS OF ENERGY, ENVIRONMENT AND ECONOMIC**
HERGÜL A. S., KAYA D., ÇOBAN V.
6th International Conference of Ecosystems, 4 - 06 June 2016

XIII. **ANALYSIS OF A TRIGENERATION SYSTEM IN TERMS OF ENERGY ENVIRONMENT AND ECONOMIC**
HERGÜL A. S., KAYA D., ÇOBAN V.
6th International Conference of Ecosystems, Tirane, Albania, 3 - 06 June 2016, vol.1, pp.88

XIV. **Endüstriyel Tesislerde Enerji Verimliliği Uygulamaları II**
KAYA D., EYİDOĞAN M., ÇOBAN V., ÇAĞMAN S., HERGÜL A. S., SAPMAZ S.
6. Enerji Verimliliği Kalitesi Sempozyumu ve Sergisi Enerji Verimliliği Kongresi 2015, Sakarya, Turkey, 4 - 06 June 2015, vol.1, pp.160-162

XV. **Endüstriyel Tesislerde Enerji Verimliliği Uygulamaları I**
KAYA D., EYİDOĞAN M., ÇOBAN V., ÇAĞMAN S., HERGÜL A. S., SAPMAZ S.
6. Enerji Verimliliği Kalitesi Sempozyumu ve Sergisi Enerji Verimliliği Kongresi 2015, Sakarya, Turkey, 4 - 06 June 2015, vol.1, pp.157-159

XVI. **ENDÜSTRİYEL TESİSLERDE ENERJİ VERİMLİLİĞİ UYGULAMALARI-I-II**
KAYA D., EYİDOĞAN M., ÇOBAN V., ÇAĞMAN S., HERGÜL A. S., SAPMAZ S.
VI.ENERJİ VERİMLİLİĞİ, KALİTESİ SEMPOZYUMU VE SERGİSİ, Sakarya, Turkey, 4 - 06 June 2015

XVII. **Lead Acid Battery Energy Storage Systems And State Of Charge Estimation Under Observable Circumstances**
İNCE K., HERGÜL A. S.
SOLARTR 2014, İzmir, Turkey, 19 - 21 September 2014, vol.1, pp.580-586

XVIII. **Surface Modificiation of TiO2 Nanostructures by Fe2O3 for Enhanced Performance of Dye Sensitized Solar Cell**
KILIÇ B., HERGÜL A. S., Alp S., GEDİK N., Mucur S. P.
SolarTR 2014, İzmir, Turkey, 19 - 21 November 2014

XIX. **BAND GAP ENGINEERING AND OPTOELECTRONIC PROPERTIES OF METAL DOPED TIO2**
KILIÇ B., Mucur S. P., GEDİK N., HERGÜL A. S., GÜR E.

SOLARTR 2014, İzmir, Turkey, 19 - 21 November 2014

XX. **NanoTR 9 2013 9th Nanoscience and Nanotechnology Conference**
HERGÜL A. S., BAŞ A., KARACA G., KILIÇ B.
NanoTR-9-2013: 9th Nanoscience and Nanotechnology Conference, 24 - 28 June 2013

XXI. **Growth of TiO2 Nanoparticles by Hydrothermal Method for Dye Sensitized Solar Cell**
HERGÜL A. S., BAŞ A., KARACA G., KILIÇ B.
Nano TR9-2013 Nanoscience and Nanotechnology Conference, 24 - 28 June 2013

Scientific Consultations

TÜBİTAK, Project Consultancy, Kocaeli University, Teknoloji Fakültesi, Enerji Sistemleri Mühendisliği, Turkey, 2015 - 2015

Metrics

Publication: 30
Citation (WoS): 29
Citation (Scopus): 42
H-Index (WoS): 2
H-Index (Scopus): 3

Awards

Hergül A. S., Surface Modificiation of TiO2 Nanostructures by Fe2O3 for Enhanced Performance of Dye Sensitized Solar Cell, Solar Tr, November 2014

Non Academic Experience

Aksa Akrilik Kimya Sanayi
Db Tarımsal Enerji Biyodizel
Özel Yasemin Pakkan Dershanesi