

Assoc. Prof. ALİ CAN YILMAZ

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: G-1097-2018

Yoksis Researcher ID: 129883

Education Information

Doctorate, Cukurova University, Mühendislik-Mimarlık Fakültesi/Fen Bilimleri/Makine Müh., Otomotiv, Turkey 2010 - 2015

Postgraduate, Cukurova University, Mühendislik-Mimarlık Fakültesi/Fen Bilimleri/Makine Müh., Otomotiv, Turkey 2007 - 2010

Undergraduate, Istanbul University, Mühendislik Fakültesi/Makine Mühendisliği Bölümü, Turkey 2003 - 2007

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Determination of Defect Ratios of Traffic Accident Involvements By Using Accident Reconstruction Tools- Devam ediyor, Cukurova University, Makine Mühendisliği, Otomotiv, 2015

Postgraduate, Design and Applications of Hydroxy (HHO) System, Cukurova University, Mühendislik-Mimarlık Fakültesi/Makine Müh., Otomotiv, 2010

Research Areas

Mechanical Engineering, Energy, Renewable Energy Systems, Alternative Energy Resources, Energy storage technologies, Hydrogen Technologies and Fuel Cells , Thermodynamics, Fuels and Combustion, Internal Combustion Engines, Engineering and Technology

Academic Titles / Tasks

Associate Professor, Cukurova University, Adana Meslek Yüksek Okulu, Adana Meslek Yüksekokulu, 2020 - Continues

Lecturer, Cukurova University, Adana Meslek Yüksek Okulu, Adana Meslek Yüksekokulu, 2014 - 2020

Research Assistant, Cukurova University, Mühendislik Fakültesi, Makina Müh., 2009 - 2014

Courses

Matematik II, Associate Degree, 2014 - 2015
Isıtma ve Soğutma Sistemleri, Associate Degree, 2015 - 2016
Alternatif Motorlar ve Yakıt Sistemleri, Associate Degree, 2014 - 2015
İşçi Sağlığı ve Güvenliği, Associate Degree, 2014 - 2015
Soğutma Sistem Tasarımı, Associate Degree, 2014 - 2015
Elektrikli ve Hibrit Taşıtlar, Associate Degree, 2014 - 2015
Matematik II, Associate Degree, 2014 - 2015
Emisyon Kontrol Sistemleri ve Çevre Koruma, Associate Degree, 2013 - 2014
Hidrolik-Pnömatik Sistemler, Associate Degree, 2014 - 2015
Taşıtlar Mekaniği, Associate Degree, 2013 - 2014
Doğalgaz Tesisatı, Associate Degree, 2014 - 2015
Otomotiv Güç Aktarma Organları, Associate Degree, 2014 - 2015
Buji Ateşlemeli Motorların Yakıt ve Ateşleme Sistemleri, Associate Degree, 2013 - 2014
Ticari Soğutma Sistemleri, Associate Degree, 2014 - 2015
Otomotiv Elektrikliği, Associate Degree, 2014 - 2015
Matematik I, Associate Degree, 2014 - 2015
Dizel Motorlar ve Yakıt Enjeksiyon Sistemleri, Associate Degree, 2013 - 2014
Otomotiv Elektroniği, Associate Degree, 2013 - 2014
Malzeme Teknolojisi, Associate Degree, 2013 - 2014
İşçi Sağlığı ve Güvenliği, Associate Degree, 2014 - 2015
Hidrolik-Pnömatik, Associate Degree, 2014 - 2015

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Conjoint impact of modified HHO system, compression ratio variation, and tribological enhancement of steel piston ring substrates on performance and emission characteristics of a spark-ignition engine**
YILMAZ A. C.
International Journal of Hydrogen Energy, vol.77, pp.54-68, 2024 (SCI-Expanded)
- II. **Cooling and Tribological Performance Analyses of a Refrigeration System Using Nano-fluids as Refrigerant and Lubricant**
Yılmaz A. C., Coşgun A.
IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY - TRANSACTIONS OF MECHANICAL ENGINEERING, vol.48, no.2, pp.100-121, 2024 (SCI-Expanded)
- III. **Crystalline Carbon Deposition on Piston Ring Substrates and Its Effects on Tribological Characteristics, Engine Performance, and Emissions**
ESEN M., YILMAZ A. C.
Advanced Engineering Materials, 2024 (SCI-Expanded)
- IV. **Production and Characterization of Eco-composite Polylactic Acid Films Doped with Carob Pod Powder/Silver Nanoparticles and Their Potential Utilization in Packaging Applications**
Erdem O., MUTLU A., YILMAZ A. C.
Journal of Polymers and the Environment, 2024 (SCI-Expanded)
- V. **Improving Tribological Performance of Piston Ring Steel Substrates by DLC/Nano-crystalline Diamond Coating**
YILMAZ A. C., ESEN M.
ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, vol.47, no.12, pp.15441-15453, 2022 (SCI-Expanded)
- VI. **Performance evaluation of a refrigeration system using nanolubricant**
YILMAZ A. C.
APPLIED NANOSCIENCE, vol.10, no.5, pp.1667-1678, 2020 (SCI-Expanded)
- VII. **Tribological Enhancement Features of Various Nanoparticles as Engine Lubricant Additives: An**

Experimental Study

YILMAZ A. C.

ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, vol.45, no.2, pp.1125-1134, 2020 (SCI-Expanded)

VIII. **PA6/SILVER BLENDS: INVESTIGATION OF MECHANICAL AND ELECTROMAGNETIC SHIELDING BEHAVIOUR OF ELECTROSPUN NANOFIBERS**

SANCAK E., ÖZEN M. S., ERDEM R., YILMAZ A. C., YÜKSEK M., Soin N., Shah T.

TEKSTİL VE KONFEKSİYON, vol.28, no.3, pp.229-235, 2018 (SCI-Expanded)

IX. **Analyses of the mechanical, electrical and electromagnetic shielding properties of thermoplastic composites doped with conductive nanofillers**

YILMAZ A. C., ÖZEN M. S., SANCAK E., ERDEM R., Erdem O., Soin N.

JOURNAL OF COMPOSITE MATERIALS, vol.52, no.11, pp.1423-1432, 2018 (SCI-Expanded)

X. **Traffic accident reconstruction and an approach for prediction of fault rates using artificial neural networks: A case study in Turkey**

YILMAZ A. C., Aci C., AYDIN K.

TRAFFIC INJURY PREVENTION, vol.17, no.6, pp.585-589, 2016 (SCI-Expanded)

XI. **Effect of nanoparticle additives on NO_x emissions of diesel fuelled compression ignition engine**

ÖZGÜR T., TÜCCAR G., ULUDAMAR E., YILMAZ A. C., GUNGOR C., ÖZCANLI M., SERİN H., AYDIN K.

INTERNATIONAL JOURNAL OF GLOBAL WARMING, vol.7, no.4, pp.487-498, 2015 (SCI-Expanded)

XII. **Determination of effects of various alcohol additions into peanut methyl ester on performance and emission characteristics of a compression ignition engine**

TOSUN E., YILMAZ A. C., ÖZCANLI M., AYDIN K.

FUEL, vol.126, pp.38-43, 2014 (SCI-Expanded)

XIII. **Effect of hydroxy (HHO) gas addition on performance and exhaust emissions in compression ignition engines**

YILMAZ A. C., ULUDAMAR E., AYDIN K.

INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.35, no.20, pp.11366-11372, 2010 (SCI-Expanded)

Articles Published in Other Journals

I. **A New Approach for Improving Flame Retardancy of Automotive Interior Upholstery**

ERDEM Ö., YILMAZ A. C., COSGUN A.

Çukurova Üniversitesi Mühendislik Fakültesi dergisi, vol.39, no.3, pp.577-584, 2024 (Peer-Reviewed Journal)

II. **Reducing fuel consumption of a light-duty vehicle by incorporating CuO nanoparticles in compressor lubricant of air-conditioning system**

Yılmaz A. C., Erdem Yılmaz Ö.

International Journal of Automotive Engineering and Technologies, vol.13, no.1, pp.12-22, 2024 (Peer-Reviewed Journal)

III. **Fretting behavior of piston ring-cylinder liner components of a diesel engine running on TiO₂ nanolubricant**

Yılmaz A. C.

Journal of advanced research in natural and applied sciences (Online), vol.8, no.4, pp.762-776, 2022 (Peer-Reviewed Journal)

IV. **Effects of fly ash introduction on friction and wear characteristics of brake pads**

Yılmaz A. C.

International Journal of Automotive Engineering and Technology, vol.11, no.3, pp.96-103, 2022 (Peer-Reviewed Journal)

V. **Determination of effects of compression ratio variation on performance and emission characteristics of a diesel engine fueled with EDTA-doped sunflower biodiesel-petrodiesel**

YILMAZ A. C.

International Journal of Automotive Engineering and Technology, vol.8, no.3, pp.140-149, 2019 (Peer-Reviewed)

Journal)

- VI. **Effects of Nano-Lubricants on Power and CO Emission of A Diesel Engine: An Experimental Investigation**
YILMAZ A. C.
CELAL BAYAR ÜNİVERSİTESİ FEN BİLİMLERİ DERGİSİ, vol.15, no.3, pp.251-256, 2019 (Peer-Reviewed Journal)
- VII. **Maddi Hasarlı Trafik Kazaları İçin Sinirsel-Bulanık Ağ Tabanlı Bir Kusur Tespit Modeli**
ACI Ç., YILMAZ A. C.
FİRAT ÜNİVERSİTESİ MÜHENDİSLİK BİLİMLERİ DERGİSİ, vol.29, no.2, pp.241-250, 2017 (Peer-Reviewed Journal)
- VIII. **Analysis of a Traffic Accident in Turkey**
YILMAZ A. C., ACI Ç., AYDIN K.
Advances in Automobile Engineering, vol.5, no.2, pp.1-5, 2016 (Peer-Reviewed Journal)
- IX. **Biodiesel Production From Opium Poppy Oil and Determination of Its Effects on Engine Performance and Emissions of a Compression Ignition Engine**
TOSUN E., ULUDAMAR E., TÜCCAR G., YILMAZ A. C., AYDIN K.
The Journal of MacroTrends in Technology and Innovation???, vol.3, no.1, pp.1-8, 2015 (Peer-Reviewed Journal)
- X. **MFFNN and GRNN Models for Prediction of Energy Equivalent Speed Values of Involvements in Traffic Accidents**
YILMAZ A. C., ACI Ç., AYDIN K.
INTERNATIONAL JOURNAL OF AUTOMOTIVE ENGINEERING AND TECHNOLOGIES, vol.4, no.2, pp.102-109, 2015 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **Effects of Nanoadditives on Lubrication Regimes in Mechanical Systems**
YILMAZ A. C.
in: Researches on Science and Art in 21st Century Turkey, Arapgirlioglu H., Elliott R.L., Turgeon E., Atik A., Editor, Gecekitaplığı, Ankara, pp.2695-2705, 2017

Refereed Congress / Symposium Publications in Proceedings

- I. **ARAMID FIBERS AS TENSILE STRENGTH ENHANCER FOR CONCRETE BLOCKS**
YILMAZ A. C.
1st International Forum on Independence of Kazakhstan, Cultural Approaches, Modern Trends in Textile and Food Engineering, 10 - 11 December 2019
- II. **DİZEL YAKIT-KANOLA BIYODİZELİ KARIŞIMININ MOTOR PERFORMANS VE EMİSYONLARINA ETKİLERİNİN İNCELENMESİ**
YILMAZ A. C.
ANKARA INTERNATIONAL CONGRESS ON SCIENTIFIC RESEARCHES, 4 - 06 October 2019
- III. **BIYODİZEL ÜRETİM YÖNTEMLERİ VE KARŞILAŞTIRMASI**
ERDEM Ö., YILMAZ A. C.
ANKARA INTERNATIONAL CONGRESS ON SCIENTIFIC RESEARCHES, 4 - 06 October 2019
- IV. **ENHANCING TRIBOLOGICAL CHARACTERISTICS OF PISTON RINGS OF INTERNAL COMBUSTION ENGINES USING ECR-CVD COATING METHOD**
ESEN M., ESEN M., YILMAZ A. C.
TFD 35. Uluslararası Fizik Kongresi, Muğla, Turkey, 4 - 08 September 2019, pp.40-41
- V. **Performance evaluation of a refrigeration system using nanofluid**
YILMAZ A. C.
4th International Mediterranean Science and Engineering Congress, 25 - 27 April 2019
- VI. **High precision hydrogen gas sensor doped with CuFeZn₂O₄ nanofiber**

ERDEM Ö., ERDEM R., YILMAZ A. C.

4th International Mediterranean Science and Engineering Congress, 25 - 27 April 2019

VII. **Kevlar-49 lif katkısının betonun çekme dayanımına etkisi**

YILMAZ A. C., ERDEM YILMAZ Ö., YÜCEL A.

4 International Mediterranean Science and Engineering Congress, Antalya, Turkey, 25 - 27 April 2019, pp.163-164

VIII. **Dispersion of CuO nano particles in the lubricant of a vapor compression refrigeration system: An investigation on enhancing coefficient of performance**

YILMAZ A. C., ERDEM R., ERDEM YILMAZ Ö.

42nd International Academic Conference, Roma, Italy, 10 - 13 September 2018, pp.49

IX. **The Impact of Solvents on the Properties of Electrospun Nanofibers**

ERDEM R., ERDEM YILMAZ Ö., YILMAZ A. C.

42th International Academic Conference, Roma, Italy, 10 - 13 September 2018, pp.51-59

X. **HİBRİT SiO₂-TiO₂ VE ZNO-ZRO₂ NANO KATKILARININ TRİBOLOJİK İYİLEŞTİRME ETKİLERİNİN KİYASLANMASI**

YILMAZ A. C., ERDEM YILMAZ Ö.

ULUSLARARASI MULTİDİSİPLİNER ÇALIŞMALARI KONGRESİ, Antalya, Turkey, 25 - 26 November 2017, pp.15

XI. **YAPAY ZEKA İLE ARAÇ ÇARPIŞMA HIZI TAHMİN ANALİZİ**

YILMAZ A. C., ERDEM YILMAZ Ö.

ULUSLARARASI MULTİDİSİPLİNER ÇALIŞMALARI KONGRESİ, Antalya, Turkey, 25 - 26 November 2017, pp.16

XII. **Motorine Etilen diamin tetraasetik asit katkısının dizel motorun performans ve emisyonlarına etkisi**

ERDEM Ö., YILMAZ A. C.

Uluslararası Multidisipliner Çalışma Kongresi, Antalya, Turkey, 25 - 26 November 2017, pp.10

XIII. **Enhancing tribological properties of engine lubricants using nano additives**

YILMAZ A. C., AYDIN K.

2nd International Mediterranean Science and Engineering Congress (IMSEC 2017), Adana, Turkey, 25 - 27 October 2017, pp.257-261

XIV. **PA6/Silver blends: Investigation of Mechanical and Electromagnetic Shielding Behaviour of Electrospun Nanofibers**

SANCAK E., ÖZEN M. S., YILMAZ A. C., ERDEM R., YÜKSEK M., SOIN N., SHAH T.

12th International Conference on Surfaces, Coatings and Nanostructured Materials, 11 - 13 October 2017

XV. **Determination of effects of Ethylenediaminetetraacetic acid (EDTA/H₄EDTA) addition into sunflower methyl ester on performance and emission characteristics of a compression ignition engine**

ERDEM Ö., YILMAZ A. C.

II. International Turkic World Conference on Chemical Sciences and Technologies, Skopje, Macedonia, 26 - 30 October 2016, pp.428

XVI. **Analyses of the Mechanical Electrical and Electromagnetic Shielding Properties of Thermoplastic Composites Doped with Conductive Nanofillers**

YILMAZ A. C., ÖZEN M. S., SANCAK E., ERDEM R., ERDEM Ö.

11th International Conference on Surfaces, Coatings & Nanostructured Materials, 6 - 09 September 2016

XVII. **Implementation of Kevlar 779 Fiber Supported Composites as Reinforcement Material For Car Body**

YILMAZ A. C., ERDEM R., ERDEM Ö.

VIII. UTIB International R&D Brokerage Event, Bursa, Turkey, 12 - 13 May 2016, pp.60

XVIII. **Dying of Multi-Species Fiber Fabrics with Disperse Dyestuffs Using Waterless Media in Custom Reactor**

ERDEM Ö., ERDEM R., YILMAZ A. C.

VIII. UTIB International R&D Brokerage Event, Bursa, Turkey, 12 - 13 May 2016, pp.7

XIX. **Impact Velocity Prediction in a Traffic Accident**

YILMAZ A. C., AYDIN K.

5th International Conference on Transportation and Traffic Engineering (ICTTE), Lucerne, Switzerland, 6 - 10 July 2016, vol.81

- XX. **GRNN and MFFNN Models for Energy Equivalence Speed Prediction and Fault Rate Determination of Involvements in Traffic Accidents Case Study in Turkey**
Yılmaz A. C., Acı Ç., Aydın K.
Proceeding of International Conference and Exhibition on Automobile Engineering, Valencia, Spain, 1 - 02 September 2015, vol.4, pp.42
- XXI. **GRNN and MFFNN Models for Energy Equivalent Speed Prediction and Fault Rate Determination of Involvements in Traffic Accidents: A case study in Turkey**
YILMAZ A. C., ACI Ç., AYDIN K.
International Conference and Exhibition on Automobile Engineering, Valencia, Spain, 1 - 02 September 2015, pp.15
- XXII. **Biodiesel Production From Opium Poppy Oil and Determination of Its Effects on Engine Performance and Emissions of a Compression Ignition Engine**
TOSUN E., ULUDAMAR E., TÜCCAR G., YILMAZ A. C., AYDIN K.
The MacroJournals Conference on Medicine, Science, and Technology - Dubrovnik 2015, Dubrovnik, Croatia, 3 - 04 August 2015, vol.3, no.1, pp.1-8
- XXIII. **MFFNN and GRNN Models for Prediction of Energy Equivalent Speed Values of Involvements in Traffic Accidents**
YILMAZ A. C., ACI Ç., AYDIN K.
International Conference on Advanced Science and Technology (ICAT '14), Antalya, Turkey, 12 - 15 August 2014, pp.260
- XXIV. **Effect of nanoparticle additives on NOx emissions of diesel fueled compression ignition engine**
ÖZGÜR T., Tüccar G., ULUDAMAR E., YILMAZ A. C., ÖZGÜR C., ÖZCANLI M., SERİN H., AYDIN K.
6th International Ege Energy Symposium & Exhibition, İzmir, Turkey, 28 - 30 June 2012, pp.308-317
- XXV. **Palmiye Yağında Kızartılmış Tavuk Yağlarından Biyodizel Eldesi, Yakıt Özellikleri ve Motorin ile Karışımlarının İncelenmesi**
ÖZGÜR C., YILMAZ A. C., Yılmaz A., SERİN H., ÖZCANLI M., AYDIN K.
V. Yeni ve Yenilenebilir Enerji Kaynakları Sempozyumu, Kayseri, Turkey, 21 - 22 October 2011, pp.416-424
- XXVI. **ÇUKUROVA ÜNİVERSİTESİNDE BULUNAN PALMIYE AĞAÇLARININ TOHURLARINDAN BİYODİZEL ÜRETİM POTANSİYELİNİN İNCELENMESİ**
ULUDAMAR E., YILMAZ A. C., AYDIN K.
ANADOLU ENERJİ SEMPOZYUMU, Turkey, 22 - 24 June 2011
- XXVII. **Çukurova Üniversitesi'nde Bulunan Palmiye Ağaçlarının Tohumlarından Biyodizel Üretim Potansiyelinin İncelenmesi**
ULUDAMAR E., YILMAZ A. C., AYDIN K.
Anadolu Enerji Sempozyumu, Elazığ, Turkey, 22 - 24 June 2011, pp.320-328
- XXVIII. **Experimental Analysis of the Effect of Hydroxy (HHO) Gas Addition to the Fuel on Performance and Exhaust Emissions in Spark Ignition Engines**
YILMAZ A. C., ULUDAMAR E., AYDIN K.
International Ege Energy Symposium and Exhibition (IEESE-5), Denizli, Turkey, 27 - 30 June 2010, pp.1-4
- XXIX. **Experimental Analysis of the Effect of Hydroxy (HHO) Addition to the Fuel on Performance and Exhaust Emissions in Spark Ignition Engines**
YILMAZ A. C., ULUDAMAR E., AYDIN K.
5th International Ege Energy Symposium, 27 - 30 June 2010

Supported Projects

ERDEM YILMAZ Ö., ERDEM R., YILMAZ A. C., Project Supported by Higher Education Institutions, Ferrosen Poliüretan Matrisinin Hazırlanması ve Nanoliflerin Eldesi, 2018 - 2019

YILMAZ A. C., SANCAK E., ERDEM R., SHAH T., ÖZEN M. S., SOIN N., Project Supported by Higher Education Institutions, PA6Silver blends Investigation of Mechanical and Electromagnetic Shielding Behaviour of Electrospun Nanofibers, 2017 - 2018

ERDEM YILMAZ Ö., YILMAZ A. C., ERDEM R., Project Supported by Higher Education Institutions, Polimer Bazlı Nanofiber İskelet Yapılarının Elektroçekim Yöntemi ile Üretilmesi ve Özelliklerinin İncelenmesi, 2017 - 2018

YILMAZ A. C., AYDIN K., Project Supported by Higher Education Institutions, Impact Velocity Prediction in a Traffic Accident, 2016 - 2017

ERDEM YILMAZ Ö., YILMAZ A. C., ERDEM R., Project Supported by Higher Education Institutions, Nanopartikül Sentezi ve Elektro Çekim ile Nanolif Üretimi, 2016 - 2016

YILMAZ A. C., ERDEM Ö., SANCAK E., ÖZEN M. S., ERDEM R., Project Supported by Higher Education Institutions, Karbon Nanoliflerle Güçlendirilmiş Kompozit Üretimi: Otomotiv Kaportalarındaki Muhtemel Uygulamaları, 2016 - 2016

AYDIN K., YILMAZ A. C., Project Supported by Higher Education Institutions, Trafik Kazası Yeniden Canlandırma Yazılımı Kullanarak Kazaya Karışanların Kusur Oranlarının Belirlenmesi (Determination of Defect Rates of Traffic Accident Involvements By Using Accident Reconstruction Tools), 2014 - 2015

Scientific Refereeing

Journal of Composite Materials, SCI Journal, December 2017

Synthesis and Reactivity in Inorganic, Metal-Organic, and Nano-Metal Chemistry, SCI Journal, July 2015

Fuel, SCI Journal, May 2015

Metrics

Publication: 54

Citation (WoS): 159

Citation (Scopus): 225

H-Index (WoS): 6

H-Index (Scopus): 8

Awards

YILMAZ A. C., Certificate of Excellence (Excellent Paper Award), International Society for Engineers and Researchers, November 2017

Non Academic Experience

Business Establishment Private, İlke Yapı Denetim Ltd. Şti.

İlke Yapı Denetim Ltd.Şti.