

Prof. ERCAN KARAKÖSE

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: ABC-9395-2020

ScopusID: 23018559800

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Education Information

Doctorate, Erciyes University, Fen Bilimleri Enstitüsü, Fizik Anabilim Dalı, Turkey 2005 - 2010

Postgraduate, Erciyes University, Fen Bilimleri Enstitüsü, Fizik Anabilim Dalı, Turkey 2000 - 2004

Undergraduate, Erciyes University, Fen Fakültesi, Fizik Bölümü, Turkey 1996 - 2000

Certificates, Courses and Trainings

Education Management and Planning, Eğitim Yönetimi Semineri, M.E.B. Hizmetiçi Eğitim Dairesi Başkanlığı, 2007

Other, The Professional Metallographer, Struers Company, 2007

Dissertations

Doctorate, Al Esaslı Ağırlıkça %8Ni, %5Nd, %XSi (X=4, 8, 12) İçeren Alaşımların Melt Spinning Yöntemiyle Üretimi ve Karakterizasyonu, Erciyes Üniversitesi, Fen Bilimleri Enstitüsü, Fizik Anabilim Dalı, 2010

Postgraduate, Melt Spining Metoduyla Ağırlıkça %91Al-%6Ni-%2Cu-%1Si Alaşımının Üretilmesi ve Üretilen Numunelerin Fiziksel Özelliklerinin İncelenmesi, Erciyes Üniversitesi, Fen Bilimleri Enstitüsü, Fizik Anabilim Dalı, 2004

Research Areas

Physics, Condensed Matter 1: Structural, Mechanical and Thermal Properties, Natural Sciences

Academic Titles / Tasks

Professor, Kayseri University, Teknik Bilimler Meslek Yüksekokulu, Motorlu Araçlar ve Ulaştırma Teknolojileri Bölümü, 2019 - Continues

Associate Professor, Erciyes University, Motorlu Araçlar Ve Ulaştırma Teknolojisi, 2017 - 2018

Associate Professor, Cankiri Karatekin University, Faculty Of Science, Department Of Physics, 2013 - 2017

Assistant Professor, Cankiri Karatekin University, Faculty Of Science, Department Of Physics, 2010 - 2010

Academic and Administrative Experience

University Executive Board Member, Kayseri University, Mühendislik, Mimarlık ve Tasarım Fakültesi, Mühendislik Temel Bilimleri Bölümü, 2022 - Continues

Rektörlük Stratejik Plan Komisyonu Üyesi, Kayseri University, Mühendislik, Mimarlık ve Tasarım Fakültesi, Mühendislik Temel Bilimleri Bölümü, 2022 - Continues

Member of the Commission, Kayseri University, Mühendislik, Mimarlık ve Tasarım Fakültesi, Mühendislik Temel Bilimleri Bölümü, 2022 - Continues

Fakülte Kurulu Üyesi, Kayseri University, Develi Sosyal ve Beşeri Bilimler Fakültesi, 2022 - Continues

Meslek Yüksekokulları Koordinatörü , Kayseri University, Mühendislik, Mimarlık ve Tasarım Fakültesi, Mühendislik Temel Bilimleri Bölümü, 2019 - Continues

Üniversitelerarası Kurul Üyesi , Kayseri University, Mühendislik, Mimarlık ve Tasarım Fakültesi, Mühendislik Temel Bilimleri Bölümü, 2019 - Continues

Director of Vocational School, Kayseri University, Teknik Bilimler Meslek Yüksekokulu, -, 2019 - Continues

Birim Stratejik Plan Komisyonu Başkanı, Kayseri University, Mühendislik, Mimarlık ve Tasarım Fakültesi, Mühendislik Temel Bilimleri Bölümü, 2018 - Continues

Head of Department, Kayseri University, Teknik Bilimler Meslek Yüksekokulu, Motorlu Araçlar ve Ulaştırma Teknolojileri Bölümü, 2018 - Continues

Member of the Senate, Kayseri University, Mühendislik, Mimarlık ve Tasarım Fakültesi, Mühendislik Temel Bilimleri Bölümü, 2018 - Continues

BAP Coordinator, Kayseri University, Mühendislik, Mimarlık ve Tasarım Fakültesi, Mühendislik Temel Bilimleri Bölümü, 2019 - 2019

Director of Vocational School, Kayseri University, Teknik Bilimler Meslek Yüksekokulu, -, 2018 - 2019

Head of Department, Erciyes University, Teknik Bilimler Meslek Yüksekokulu, Motorlu Araçlar ve Ulaştırma Teknolojileri Bölümü, 2018 - 2018

Çankırı Karatekin Üniversitesi, 2016 - 2018

Çankırı Karatekin Üniversitesi, Fen Fakültesi, 2014 - 2018

Çankırı Karatekin Üniversitesi, 2016 - 2017

Çankırı Karatekin Üniversitesi, Mühendislik Fakültesi, 2016 - 2017

Çankırı Karatekin Üniversitesi, 2015 - 2017

Erciyes Üniversitesi, 2014 - 2016

Courses

FİZİK 2, Undergraduate, 2021 - 2022

Fizik 1, Undergraduate, 2021 - 2022

Advising Theses

KARAKÖSE E., YÜKSEK DEĞERLİKLİ METAL KATKILI ZNO İNCE FİLMLERİNİN ULTRASONİK SPREY PİROLİZ YÖNTEMİ İLE ÜRETİLMESİ, ELEKTRİKSEL VE OPTİK ÖZELLİKLERİNİN BELİRLENMESİ, Postgraduate, Ç.Songür(Student), 2018

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Fabrication and investigation of zinc oxide nanorods doped with molybdenum via ultrasonic spray pyrolysis**
Çolak H., KARAKÖSE E.
International Journal of Applied Ceramic Technology, vol.21, no.1, pp.114-123, 2024 (SCI-Expanded)
- II. **Niobium doping effect on electrical and optical properties of ZnO nanorods produced by ultrasonic spray pyrolysis**

Çolak H., KARAKÖSE E., Sungür Ç.

Physica B: Condensed Matter, vol.671, 2023 (SCI-Expanded)

- III. **Multi-focus image fusion by using swarm and physics based metaheuristic algorithms: a comparative study with archimedes, atomic orbital search, equilibrium, particle swarm, artificial bee colony and jellyfish search optimizers**
Çakıroğlu F., KURBAN R., Durmuş A., KARAKÖSE E.
Multimedia Tools and Applications, vol.82, no.29, pp.44859-44883, 2023 (SCI-Expanded)
- IV. **Classification of apple images using support vector machines and deep residual networks**
Adige S., KURBAN R., Durmuş A., KARAKÖSE E.
Neural Computing and Applications, vol.35, no.16, pp.12073-12087, 2023 (SCI-Expanded)
- V. **Gadolinium(III)-doped ZnO nanorods and gas sensing properties**
Çolak H., KARAKÖSE E.
MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, vol.139, 2022 (SCI-Expanded)
- VI. **Change of intermetallic phases and mechanical features in rapidly solidified hypereutectic Al-3Ni-3Sb alloy**
KARAKÖSE E., KESKİN M.
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, vol.127, no.11, 2021 (SCI-Expanded)
- VII. **A comparison of novel metaheuristic algorithms on color aerial image multilevel thresholding**
KURBAN R., Durmuş A., KARAKÖSE E.
Engineering Applications of Artificial Intelligence, vol.105, 2021 (SCI-Expanded)
- VIII. **A comparison of swarm-based optimization algorithms in linear antenna array synthesis**
Durmuş A., KURBAN R., KARAKÖSE E.
Journal of Computational Electronics, vol.20, no.4, pp.1520-1531, 2021 (SCI-Expanded)
- IX. **Microstructural and mechanical properties of melt-spun Al-3Ni-3Si alloy**
Karakose E., KESKİN M.
MATERIALS LETTERS, vol.286, 2021 (SCI-Expanded)
- X. **Electrical and Optical Properties of Well-Aligned Ho³⁺-Doped ZnO Nanorods as an Alternative Transparent Conducting Oxide**
ÇOLAK H., KARAKÖSE E.
JOM, vol.73, no.1, pp.395-403, 2021 (SCI-Expanded)
- XI. **The Effect of Magnesium Additions on Microstructural, Thermal, and Mechanical Properties of Rapidly Solidified Al-5.5wt.%Zn-x wt.%Mg (x=1, 5) Alloys**
KARAKÖSE E., ÇOLAK H., KESKİN M.
JOURNAL OF MATERIALS ENGINEERING AND PERFORMANCE, vol.29, no.11, pp.7308-7320, 2020 (SCI-Expanded)
- XII. **Comprehensive experimental study on production of vertically aligned ZnO nanorod thin films and their electrical, optical and antimicrobial properties**
ÇOLAK H., KARAKÖSE E., Derin Y., Dertli R.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.31, no.12, pp.9753-9772, 2020 (SCI-Expanded)
- XIII. **Production and examination of ZnO thin film for first time using green synthesized method from aqueous Citrus reticulata peel extract**
Durmuş A., Çolak H., Karaköse E.
Journal of Alloys and Compounds, vol.809, 2019 (SCI-Expanded)
- XIV. **Synthesis and characterization of different dopant (Ge, Nd, W)-doped ZnO nanorods and their CO₂ gas sensing applications**
Çolak H., Karaköse E.
Sensors and Actuators, B: Chemical, vol.296, 2019 (SCI-Expanded)
- XV. **Synthesis and structural, electrical, optical properties of Lu³⁺-doped ZnO nanorods**
Çolak H., Karaköse E.
Materials Science in Semiconductor Processing, vol.101, pp.230-237, 2019 (SCI-Expanded)
- XVI. **The Morphological Properties and Microhardness of As-Cast and Melt-Spun Al-5Zn-2.5Mg Alloy**

Karakose E., Ibrahim A. M., KESKİN M.

JOURNAL OF INORGANIC AND ORGANOMETALLIC POLYMERS AND MATERIALS, vol.28, no.6, pp.2645-2652, 2018 (SCI-Expanded)

- XVII. **Tm-doped ZnO nanorods as a TCO for PV applications**
Colak H., Karakose E.
JOURNAL OF RARE EARTHS, vol.36, no.10, pp.1067-1073, 2018 (SCI-Expanded)
- XVIII. **Effect of consumption of the sol-gel deposited ZnO seed layer on the growth and properties of high quality ZnO nanorods**
Colak H., Karakose E., Kartopu G.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.29, no.14, pp.11964-11971, 2018 (SCI-Expanded)
- XIX. **Structural, electrical, and antimicrobial characterization of green synthesized ZnO nanorods from aqueous Mentha extract**
Karakose E., Colak H.
MRS COMMUNICATIONS, vol.8, no.2, pp.577-585, 2018 (SCI-Expanded)
- XX. **Production of CNT-bearing melt-spun Al-2Sc-0.05CNT alloys**
Kilicaslan M. F., Karakose E.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.738, pp.182-187, 2018 (SCI-Expanded)
- XXI. **Effect of Sc addition on the microstructure and mechanical properties OF MELT-SPUN Al-10Ni alloys**
Fatih Kilicaslan M., Karakose E.
Archives of Metallurgy and Materials, vol.63, no.2, pp.575-579, 2018 (SCI-Expanded)
- XXII. **PRODUCTION OF MELT-SPUN Al-20Si-5Fe ALLOY AND BORON CARBIDE (B₄C) COMPOSITE MATERIAL**
Kilicaslan M. F., Uzun A., Karakose E.
ARCHIVES OF METALLURGY AND MATERIALS, vol.63, no.2, pp.597-600, 2018 (SCI-Expanded)
- XXIII. **Structural and optical properties of ZnO nanorods prepared by spray pyrolysis method**
Karakose E., Colak H.
ENERGY, vol.140, pp.92-97, 2017 (SCI-Expanded)
- XXIV. **High optoelectronic and antimicrobial performances of green synthesized ZnO nanoparticles using Aesculus hippocastanum**
Colak H., Karakose E., DUMAN F.
ENVIRONMENTAL CHEMISTRY LETTERS, vol.15, no.3, pp.547-552, 2017 (SCI-Expanded)
- XXV. **Structural, electrical and optical properties of green synthesized ZnO nanoparticles using aqueous extract of thyme (Thymus vulgaris)**
Colak H., Karakose E.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.28, no.16, pp.12184-12190, 2017 (SCI-Expanded)
- XXVI. **Green synthesis and antimicrobial activity of ZnO nanostructures Punica granatum shell extract**
Karakose E., Colak H., DUMAN F.
GREEN PROCESSING AND SYNTHESIS, vol.6, no.3, pp.317-323, 2017 (SCI-Expanded)
- XXVII. **Properties of ZnO nanostructures produced by mechanochemical-solid state combustion method using different precursors**
Colak H., Karakose E., Derin Y.
MATERIALS CHEMISTRY AND PHYSICS, vol.193, pp.427-437, 2017 (SCI-Expanded)
- XXVIII. **Depth sensing indentation analyses of hypereutectic Al-10Ni – XSc (X = 0, 1, 2) alloys**
Kilicaslan M. F., Karakose E.
Metals and Materials International, vol.23, no.3, pp.1-8, 2017 (SCI-Expanded)
- XXIX. **Green synthesis and characterization of nanostructured ZnO thin films using Citrus aurantifolia (lemon) peel extract by spin-coating method**
Colak H., Karakose E.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.690, pp.658-662, 2017 (SCI-Expanded)
- XXX. **Effect of substrate temperature on the structural properties of ZnO nanorods**

Karaköse E., Çolak H.

Energy, vol.141, pp.50-55, 2017 (SCI-Expanded)

- XXXI. **Effect of cooling rate and Mg addition on the structural evaluation of rapidly solidified Al-20wt%Cu-12wt%Fe alloy**
Karakose E., Colak H.
MATERIALS CHARACTERIZATION, vol.121, pp.68-75, 2016 (SCI-Expanded)
- XXXII. **Response of Mg Addition on the Dendritic Structures and Mechanical Properties of Hypoeutectic Al-10Si (Wt Pct) Alloys**
Karakose E., Yildiz M., KESKİN M.
METALLURGICAL AND MATERIALS TRANSACTIONS B-PROCESS METALLURGY AND MATERIALS PROCESSING SCIENCE, vol.47, no.4, pp.2468-2478, 2016 (SCI-Expanded)
- XXXIII. **Formation of novel rice-like intermetallic phases and changes in the mechanical, microstructural and electrical properties of Sn-5Sb alloys with addition Ag and Bi**
Karakose E., Kilicaslan M. F., Colak H.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.655, pp.378-388, 2016 (SCI-Expanded)
- XXXIV. **Effect of microstructural evolution and elevated temperature on the mechanical properties of Ni-Cr-Mo alloys**
Karakose E., KESKİN M.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.619, pp.82-90, 2015 (SCI-Expanded)
- XXXV. **Influences of high temperature on the microstructural, electrical and mechanical properties of Ni-23 wt.% Al alloy**
Karakose E., KESKİN M.
INTERNATIONAL JOURNAL OF MATERIALS RESEARCH, vol.106, no.1, pp.29-42, 2015 (SCI-Expanded)
- XXXVI. **Impact of beryllium additions on thermal and mechanical properties of conventionally solidified and melt-spun Al-4.5 wt.%Mn-x wt.%Be (x=0, 1, 3, 5) alloys**
Oz T., Karakose E., KESKİN M.
MATERIALS & DESIGN, vol.50, pp.399-412, 2013 (SCI-Expanded)
- XXXVII. **Effect of Mn additions on the microstructure and microhardness of as-cast and rapidly solidified Mg-5Ni-5Cu alloy**
Karakose E., KESKİN M.
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.367, pp.70-81, 2013 (SCI-Expanded)
- XXXVIII. **Investigation of microstructural, mechanical and thermal properties of rapidly solidified Ni-7 wt% Si alloy**
Karakose E., KESKİN M.
MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING, vol.553, pp.181-191, 2012 (SCI-Expanded)
- XXXIX. **Microstructure evolution and mechanical properties of intermetallic Ni-xSi (x=5, 10, 15, 20) alloys**
Karakose E., KESKİN M.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.528, pp.63-69, 2012 (SCI-Expanded)
- XL. **Microstructure properties and microhardness of rapidly solidified Al₆₄Cu₂₀Fe₁₂Si₄ quasicrystal alloy**
Karakose E., KESKİN M.
METALS AND MATERIALS INTERNATIONAL, vol.18, no.2, pp.257-263, 2012 (SCI-Expanded)
- XLI. **Microstructures and microhardness evolutions of melt-spun Al-8Ni-5Nd-4Si alloy**
Karakose E., KESKİN M.
MATERIALS CHARACTERIZATION, vol.65, pp.37-47, 2012 (SCI-Expanded)
- XLII. **Microstructural evolutions and hardness during heat treatment of Al₆₄Cu₂₀Fe₁₂Si₄ quasicrystal alloy**
Karakose E., KESKİN M.
PHILOSOPHICAL MAGAZINE LETTERS, vol.92, no.7, pp.314-326, 2012 (SCI-Expanded)
- XLIII. **Structural investigations of mechanical properties of Al based rapidly solidified alloys**

Karakose E., KESKİN M.

MATERIALS & DESIGN, vol.32, no.10, pp.4970-4979, 2011 (SCI-Expanded)

XLIV. Microhardness and morphologic characteristics of rapidly solidified Al-12Si-8Ni-5Nd alloy

Karakose E., KESKİN M.

METALS AND MATERIALS INTERNATIONAL, vol.16, no.3, pp.383-391, 2010 (SCI-Expanded)

XLV. Morphological characteristic of the conventional and melt-spun Al-10Ni-5.6Cu (in wt.%) alloy

Karakose E., KESKİN M.

MATERIALS CHARACTERIZATION, vol.60, no.12, pp.1569-1577, 2009 (SCI-Expanded)

XLVI. Effect of solidification rate on the microstructure and microhardness of a melt-spun Al-8Si-1Sb alloy

Karakose E., KESKİN M.

JOURNAL OF ALLOYS AND COMPOUNDS, vol.479, pp.230-236, 2009 (SCI-Expanded)

XLVII. Microstructural evolution and microhardness of a melt-spun Al-6Ni-2Cu-1Si (in wt.%) alloy

Karakose E., KARAASLAN T., KESKİN M., Uzun O.

JOURNAL OF MATERIALS PROCESSING TECHNOLOGY, vol.195, pp.58-62, 2008 (SCI-Expanded)

Refereed Congress / Symposium Publications in Proceedings

I. Structure and mechanical properties of Al-3Fe rapidly solidified alloy

Karakose E., KESKİN M.

International Conference on Advances in Materials and Processing Technologies, Paris, France, 24 - 27 October 2010, vol.1315, pp.645-646

Supported Projects

KARAKÖSE E., TUBITAK Project, Yüksek Değerlikli Metal Katkılı Zn İnce Filmlerinin Ultrasonik Sprey Piroliz Yöntemi İle Üretilmesi, Elektriksel Ve Optik Özelliklerinin Belirlenmesi, 2015 - 2017

Scientific Refereeing

ENGINEERING APPLICATIONS OF ARTIFICIAL INTELLIGENCE, SCI Journal, July 2023

JOURNAL OF NON-CRYSTALLINE SOLIDS, SCI Journal, January 2022

JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T, SCI Journal, January 2022

INORGANIC CHEMISTRY COMMUNICATIONS, SCI Journal, December 2021

MATERIALS LETTERS, SCI Journal, November 2021

• JOURNAL OF INORGANIC AND ORGANOMETALLIC POLYMERS AND MATERIAL JOIP-D-13-00052), SCI Journal, February 2017

JOURNAL OF ALLOYS AND COMPOUNDS (JALCOM-D-12-01634, JALCOM-D-12-05999, JALCOM-D-14-05533, JALCOM-D-14-05533, JALCOM-D-14-07719, JALCOM-D-15-01673, JALCOM-D-15-08738), SCI Journal, January 2017

• INTERNATIONAL JOURNAL OF MODERN PHYSICS B (JPB20074538, JPB20074119, JPB20073808R1, JPB20074538, JPB20074547R1), SCI Journal, January 2017

• The Journal of Physical Chemistry.jp-2017-02281e, SCI Journal, January 2017

Journal of Non-Crystalline Solids (OC-D-17-00701R2), SCI Journal, January 2017

• JOURNAL OF ALLOYS AND COMPOUNDS (JALCOM-D-16-02073, JALCOM-D-16-06918, JALCOM-D-16-09734, JALCOM-D-17-03505), SCI Journal, January 2017

• MATERIALS CHARACTERIZATION (MTL-9726R1, MTL-6020R1), SCI Journal, February 2015

• INTERNATIONAL JOURNAL OF MATERIALS RESEARCH (MR4205), SCI Journal, February 2015

• MATER SCI and ENG. A (MSEA-D-13-02315, D-14-02947, D-15-075246), SCI Journal, February 2015

• MATER. CHEM. PHYS.(D-10-03373R1, D-10-03373, D-10-01236, D-09-03375, D-09-02802, D-09-01293R1, D-09-

01293), SCI Journal, February 2015

J. MATER. PROCESS. TECH.(D-07-01386R1, D-07-00037), SCI Journal, February 2014

Metrics

Publication: 55

Citation (WoS): 366

Citation (Scopus): 415

H-Index (WoS): 11

H-Index (Scopus): 11

Non Academic Experience

Çankırı Karatekin Üniversitesi

MİLLÎ EĞİTİM BAKANLIĞI