Asst. Prof. GÖKÇE MEHMET AY

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International Researcher IDs
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Publons / Web Of Science ResearcherID: B-9531-2015
ScopusID: 57208190233
Yoksis Researcher ID: 161870

Education Information

Doctorate, Eskisehir Osmangazi University, Fen Bilimleri Enstitüsü, Makine Mühendisliği (Dr), Turkey 2011 - 2017
Postgraduate, Middle East Technical University, Graduate School Of Natural And Applied Sciences, Makine Mühendisliği (Yl) (Tezli), Turkey 2001 - 2004
Undergraduate, Middle East Technical University, Faculty Of Engineering, Makine Mühendisliği Bölümü, Turkey 1997 - 2001

Foreign Languages

English, C2 Mastery

Dissertations

Doctorate, AISI 4140 çelik malzemenin yüzey özelliklerini geliştirmek için yenilikçi bir PTA yöntemi, Eskisehir Osmangazi University, Fen Bilimleri Enstitüsü, Makine Mühendisliği (Dr), 2017
Postgraduate, High precesion CNC motion control, Middle East Technical University, Görme Engelliler Eğitimi Abd, Makine Mühendisliği (Yl) (Tezli), 1950

Research Areas

Mechanical Engineering, Construction and Manufacturing, Tribology

Academic Titles / Tasks

Research Assistant PhD, Eskisehir Osmangazi University, Mühendislik-Mimarlık Fakültesi, Makina Müh.Bölümü, 2013 - Continues
Research Assistant, Anadolu University, Institute Of Transportation Sciences, Department Of Transportation Economics Research, 2012 - 2013

Courses

Courses

NON DESTRUCTIVE TESTING RESEARCH, Undergraduate, 2021 - 2022, 2019 - 2020
Engineering Mechanics, Undergraduate, 2020 - 2021, 2018 - 2019
Computer Aided Design, Undergraduate, 2019 - 2020, 2018 - 2019
TAKIM VE KALIP TASARIMI, Postgraduate, 2019 - 2020
MECHANICAL LAB. I, Undergraduate, 2020 - 2021
ENGINEERING MATERIALS, Undergraduate, 2020 - 2021, 2019 - 2020
FUNDAMENTALS OF COMPUTER PROGRAMING, Undergraduate, 2016 - 2017

Published journal articles indexed by SCI, SSCI, and AHCI

I. **Comparing reflective and supportive scaffolding in 3D computer-aided design course: Engineering students' metacognitive strategies, spatial ability self-efficacy, and spatial anxiety**
Atman Uslu N., Yildiz Durak H., Gökçe Mehmet A.
COMPUTER APPLICATIONS IN ENGINEERING EDUCATION, vol.30, no.5, pp.1454-1469, 2022 (SCI-Expanded)

II. **Tribological and mechanical behavior of AISI 316L lattice-supported structures produced by laser powder bed fusion**
YASA E., AY G. M., Türkseven A.
International Journal of Advanced Manufacturing Technology, vol.118, no.5-6, pp.1733-1748, 2022 (SCI-Expanded)

III. **Optical and Nanomechanical Properties of C Coated BN Thin Film Deposited by Thermionic Vacuum Arc Technique**
AY G. M., PAT S.
ECS JOURNAL OF SOLID STATE SCIENCE AND TECHNOLOGY, vol.10, no.10, 2021 (SCI-Expanded)

IV. **Inspection of nickel-based boron carbide PTA coatings on AISI 4140 steel**
Mehmet G. M., Çelik O. N.
INDUSTRIAL LUBRICATION AND TRIBOLOGY, vol.71, no.4, pp.548-556, 2019 (SCI-Expanded)

V. **Inspection of friction and wear properties of railway rails**
Ay G. M., Çelik O. N.
ENGINEERING SCIENCE AND TECHNOLOGY-AN INTERNATIONAL JOURNAL-JESTECH, vol.16, no.2, pp.89-95, 2013 (SCI-Expanded)

Articles Published in Other Journals

I. **FRICTION AND WEAR BEHAVIOR OF PLASMA TRANSFERRED ARC COATING ON AISI 4140 STEEL OF BORON CARBIDE AND NICKEL POWDER MIXTURE**
Ay G. M., Çelik O. N.
The Online Journal of Science and Technology, vol.7, no.1, pp.54-62, 2017 (Peer-Reviewed Journal)

II. **Environmentally friendly material Hexagonal boron nitride**
Ay N., Ay G. M., Göncü Y.
Journal of Boron, vol.1, no.2, pp.66-73, 2016 (Peer-Reviewed Journal)

Books & Book Chapters

I. **Bor Nitrür**
AY N., GÖNCÜ Y., AY G. M.
in: Bor ve Malzeme Bilimi, Prof. Dr. Zafer EVİS, Editor, Boren Yayınları, Ankara, pp.1-90, 2020

II. **Akademik Araştırmalar için Bilişim Araçları**
Ay G. M.

Eskişehir Osmangazi Üniversitesi Basımevi, Eskişehir, 2017

Refereed Congress / Symposium Publications in Proceedings

I. **Bor Nitrür: Üretimi ve Uygulamalardaki Son Gelişmeler**
AY N., AY G. M., GÖNCÜ Y.
International Shymposium on Boron, Turkey, 17 - 19 April 2019

II. **Recent new applications of hBN**
AY N., GÖNCÜ Y., AY G. M.
SERES'18, III. International Ceramic Glass Porcelain Enamels Glaze and Pigment Congress, Turkey, 10 - 12 October 2018

III. **A TREATISE ON USING HEXAGONAL BORONNITRIDE FOR SPACE LUBRICATIONAPPLICATIONS**
AY G. M.
TurkeyTrib18 International Conference on Tribology, 18 - 20 April 2018

IV. **Ultrasonic assisted machining methods: A review from 1984-2017**
SOFUOĞLU M. A., ORAK S., KUŞHAN M. C., AY G. M.
TURKEYTRIB 2018, 18 - 20 April 2018

V. **An overview of parameters affecting ball-on-disk test**
AY G. M., SOFUOĞLU M. A., ÇELİK O. N.
International Congress on Applied Science and Technology (ASTECH'xx2017), 17 - 20 April 2017

VI. **An overview of equipment used for vacuum**
AY G. M., SOFUOĞLU M. A.
International Congress on Applied Science and Technology (ASTECH'xx2017), 17 - 20 April 2017

VII. **A Review of Minimum Quantity Lubrication for Machining Process**
AY G. M., ÇELİK O. N.
WITAM-2016 2ND INTERNATIONAL CONGRESS ON THE WORLD OF TECHNOLOGY AND ADVANCED MATERIALS, Kırşehir, Turkey, 28 September - 02 October 2016

VIII. **An Overview of Plasma Transferred Arc Coating on Metals**
AY G. M., ÇELİK O. N.
2nd International Congress on The World of Technology and Advanced Materials, Kırşehir, Turkey, 28 September - 02 October 2016

IX. **Overview of Solid Lubricants in Industrial Applications**
AY G. M.
WITAM-2016 2ND INTERNATIONAL CONGRESS ON THE WORLD OF TECHNOLOGY AND ADVANCED MATERIALS, Kırşehir, Turkey, 28 September - 02 October 2016

X. **Friction and Wear Behavior of Plasma Transferred Arc Coating on AISI 4140 Steel of Boron Carbide and Nickel Powder Mixture**
AY G. M., ÇELİK O. N.
ISTEC 2016 International Science and Technology Conference, Viyana, Austria, 13 - 15 July 2016, pp.416-425

XI. **Open Source in Tribology Analyzing and Visualizing Tribology Data with R**
AY G. M., ÇELİK O. N.
1 st International Conference on Engineering Technology and Applied Sciences, Afyon, Turkey, 21 - 22 April 2016

XII. **Meta analysis of factors affecting surface roughness in milling**
AY G. M., SOFUOĞLU M. A.
2nd International conference on advances in mechanical engineering, 10 - 13 May 2016

XIII. **WEAR BEHAVIOUR OF BORON CARBIDE POWDER REINFORCED COATING ON AISI 4140 PRODUCED BY PLASMA TRANSFERRED ARC**
AY G. M., ÇELİK O. N.
International Science and Technology Conference 2015, St. Petersburg, Russia, 2 - 04 September 2015, pp.965-973

XIV. **Wear Behavior of Boron Carbide Powder Reinforced Coating on AISI 4140 Produced by Plasma**

Transferred Arc
AY G. M., ÇELİK O. N.
International Science and Technology Conference, 2 - 04 September 2015

XV. **Effects of Hexagonal Boron Nitride on Tricalcium Phosphate- Hexagonal Boron Nitride Composite**
Gecgin M., Onuklu E., Eser A., GÖNCÜ Y., AY G. M.
SERES'14, International Ceramic Glass Porcelain Enamels Glaze and Pigment Congress, Turkey, 15 - 17 October 2014

XVI. **Environmental Friendly Products Contain Hexagonal Boron Nitride**
AY G. M., AY N.
SERES 2011, 10 October 2011 - 12 October 2012

Supported Projects

Yasa E., Ay G. M., TUBITAK Project, Lazerle Metal Toz Ergitme Prosesi İle Üretilmiş Kafes Yapılarının Aşınma /Sürtünme Davranışlarının Karakterizasyonu, 2020 - 2021
AY G. M., ÇELİK O. N., Project Supported by Higher Education Institutions, Çelik yüzey özelliklerini geliştirmek için PTA ile yenilikçi kaplama incelenmesi, 2015 - 2016
AY G. M., Industrial Thesis Project, Hekzagonal Bor Nitrür Özelliklerine Öğütmenin Etkisi 00090.STZ.2007-1, 2007 - 2010

Memberships / Tasks in Scientific Organizations

Makine Mühendisleri Odası, Member, 2001 - Continues, Turkey
ASME, Member, 2015 - 2018, United States Of America

Scientific Refereeing

INDUSTRIAL LUBRICATION AND TRIBOLOGY, SCI Journal, July 2020
INDUSTRIAL LUBRICATION AND TRIBOLOGY, SCI Journal, July 2020
INDUSTRIAL LUBRICATION AND TRIBOLOGY, SCI Journal, April 2020
Proceedings of the Institution of Mechanical Engineers, Part N, Journal Indexed in ESCI, December 2019
Proceedings of the Institution of Mechanical Engineers, Part N, Journal Indexed in ESCI, October 2019
JOURNAL OF THE BRAZILIAN SOCIETY OF MECHANICAL SCIENCES AND ENGINEERING, SCI Journal, June 2019
SURFACE & COATINGS TECHNOLOGY, SCI Journal, May 2019
JOURNAL OF THE BRAZILIAN SOCIETY OF MECHANICAL SCIENCES AND ENGINEERING, SCI Journal, January 2019
SURFACE REVIEW AND LETTERS, SCI Journal, November 2018
JOURNAL OF THE BRAZILIAN SOCIETY OF MECHANICAL SCIENCES AND ENGINEERING, SCI Journal, November 2018
SURFACE REVIEW AND LETTERS, SCI Journal, August 2018
JOURNAL OF THE BRAZILIAN SOCIETY OF MECHANICAL SCIENCES AND ENGINEERING, SCI Journal, April 2018
JOURNAL OF THE BRAZILIAN SOCIETY OF MECHANICAL SCIENCES AND ENGINEERING, SCI Journal, March 2018
JOURNAL OF THE BRAZILIAN SOCIETY OF MECHANICAL SCIENCES AND ENGINEERING, SCI Journal, October 2017

Scientific Consultations

Bortek A.Ş., Scientific Consultancy, Eskisehir Osmangazi University, Mühendislik-Mimarlık Fakültesi, Makina Müh.Bölümü, Turkey, 2018 - Continues

Scientific Research / Working Group Memberships

Respiraworks A 501(C)(3) Non-Profit Organization, Amerika Birleşik Devletleri, https://respira.works/, 2021 - Continues

Metrics

Publication: 27

Entrepreneurship Activities

Anonymous, Bortek Boron Technologies and Mechatronic AŞ, 16 June 2006, Co-Founder

Non Academic Experience

BORTEK Bor Teknolojileri ve Mekatronik Ltd Şti.
Onat Makine Isı Enerji Sistemleri Ltd. Şti.