

## Doç.Dr. Rıdvan GECÜ

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### Uluslararası Araştırmacı ID'leri

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Publons / Web Of Science ResearcherID: AAZ-4751-2020

ScopusID: 57193953931

Yoksis Araştırmacı ID: 41251

## Eğitim Bilgileri

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- I. Doktora, Yıldız Teknik Üniversitesi, Kimya-Metalurji Fakültesi, Met.Ve Malzeme Müh.Böl., Türkiye 2014 - 2019
- II. Yüksek Lisans, İstanbul Teknik Üniversitesi, Kimya-Metalurji Fakültesi, Metalurji Ve Malzeme Mühendisliği, Türkiye 2012 - 2014
- III. Lisans, İstanbul Teknik Üniversitesi, Kimya-Metalurji Fakültesi, Metalurji Ve Malzeme Mühendisliği, Türkiye 2007 - 2012

## Yabancı Diller

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- I. İngilizce, C1 İleri

## Yaptığı Tezler

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- I. Yüksek Lisans, Gaz Nitrürlenerek Sertleştirilmiş 31CrMoV9 Çeliginde İndentasyon Yöntemiyle Kalıntı Gerilme Ve Sertlik Değişimlerinin İncelenmesi, İstanbul Teknik Üniversitesi, Kimya-Metalurji, Metalurji Ve Malzeme Mühendisliği, 2014

## Araştırma Alanları

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Metalurji ve Malzeme Mühendisliği, Malzeme Bilimi ve Mühendisliği, Kompozitler, Mühendislik ve Teknoloji

## Akademik Unvanlar / Görevler

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- I. Araştırma Görevlisi Dr., Yıldız Teknik Üniversitesi, Kimya-Metalurji Fakültesi, Met.Ve Malzeme Müh.Böl., 2013 - Devam Ediyor

## Yönetilen Tezler

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- I. Birol B., Gecü R., Toz metalurjisinde BorKarbür (B4C) takviyeli çift fazlı(dupleks) paslanmaz çelik matrisli kompozit üretim araştırması ve karakterizasyonu, Yüksek Lisans, S.ÖRÜCÜ(Öğrenci), 2023

## SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

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- I. Effects of Ti addition and wall thickness on microstructure, hardness, and wear properties of spheroidal graphite cast irons  
Kaymak K., Tazegül Y., Keyvanklı A. B., GECÜ R.  
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- II. Microstructural, hardness, and wear properties of Mg<sub>2</sub>Si-reinforced Al matrix in-situ composites produced by low superheat casting  
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- III. Enhancing wear resistance of R220 rail steels by quenching and partitioning (Q&P) treatment  
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Materials Letters, cilt.354, 2024 (SCI-Expanded)
- IV. Wear and corrosion behavior of vanadium-alloyed nodular cast irons fabricated by sand-casting  
TÜRKÜ İ. C., GECÜ R.  
Wear, cilt.534-535, 2023 (SCI-Expanded)
- V. Chemical composition optimization of Al<sub>2</sub>O<sub>3</sub>-TiO<sub>2</sub> composite coatings for enhanced wear and corrosion resistance  
Eraslan F. S., Gecü R.  
Surface and Coatings Technology, cilt.474, 2023 (SCI-Expanded)
- VI. Influence of layer number and sintering temperature on microstructural, tribological, and corrosion behavior of Al<sub>2</sub>O<sub>3</sub>-TiO<sub>2</sub> multilayer coatings  
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- VII. Influence of vanadium content and cooling rate on the characteristics of vanadium-alloyed spheroidal graphite cast irons  
Kandemir A. S., GECÜ R.  
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- VIII. Combined effects of cryogenic treatment and tempering on microstructural and tribological features of AISI H13 steel  
GECÜ R.  
MATERIALS CHEMISTRY AND PHYSICS, cilt.292, 2022 (SCI-Expanded)
- IX. Improving wear and corrosion protection of AISI 304 stainless steel by Al<sub>2</sub>O<sub>3</sub>-TiO<sub>2</sub> hybrid coating via sol-gel process  
Gecü R., Birol B., Özcan M.  
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- X. Microstructure, Mechanical, and Wear Properties of Al-Alloyed Austempered Ductile Irons  
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- XI. Volume fraction effect of stainless steel on microstructure, interface, corrosion and wear behavior of stainless steel / aluminum bimetal composites  
GECÜ R., KARAASLAN A.  
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- XII. Surface characteristics of plasma electrolytic oxidation coatings on Cp-Ti and hot-dip aluminised Cp-Ti  
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- XIII. Microstructural, mechanical and tribological characterization of aluminum-alloyed ductile cast irons based on aluminum content  
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- XIV. Microstructure, wear and corrosion characteristics of multiple-reinforced (SiC-B4C-Al<sub>2</sub>O<sub>3</sub>) Al matrix composites produced by liquid metal infiltration

- Öztürk K., Gecü R., Karaaslan A.  
CERAMICS INTERNATIONAL, cilt.47, sa.13, ss.18274-18285, 2021 (SCI-Expanded)
- XV. Casting temperature dependent wear and corrosion behavior of 304 stainless steel reinforced A356 aluminium matrix bimetal composites fabricated by vacuum-assisted melt infiltration casting  
Gecü R., Karaaslan A.  
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- XVI. Sliding Wear of the Ti-Reinforced Al Matrix Bi-metal Composite: A Potential Replacement to Conventional SiC-Reinforced Composites for Automotive Application  
GECÜ R., KARAASLAN A.  
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- XVII. Improving wear resistance of 304 stainless steel reinforced AA7075 aluminum matrix composite by micro-arc oxidation  
GECÜ R., Yurekturk Y., Tekoglu E., Muhaffel F., KARAASLAN A.  
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- XVIII. The effect of retrogression and re-aging treatment on mechanical and tribological features of AA7075 aluminium alloy Einfluss der Retrogressions- und Reaging-Behandlung auf die mechanischen und tribologischen Eigenschaften der Aluminiumlegierung AA7075  
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- XIX. A Comparative Study on Titanium-Reinforced Aluminium Matrix Composites Produced by Melt Infiltration Casting and Squeeze Infiltration  
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- XX. Microstructural and Tribological Characterization of Stainless Steel-Reinforced Aluminum Matrix Bimetal Composites Produced at Various Mold Burnout Temperatures  
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- XXI. Volume Fraction Dependent Wear Behavior of Titanium-Reinforced Aluminum Matrix Composites Manufactured by Melt Infiltration Casting  
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- XXII. Preform-Based Production of Al2O3-Reinforced Aluminium Matrix Composites by Using Various Modification Techniques  
Öztürk K., Gecü R., Karaaslan A.  
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- XXIII. A Study on Al/Cu Bimetal Production by Lost Foam Casting  
ACAR S., GECÜ R., KISASÖZ A., GÜLER K. A., KARAASLAN A.  
PRAKTISCHE METALLOGRAPHIE-PRACTICAL METALLOGRAPHY, cilt.55, sa.11, ss.728-740, 2018 (SCI-Expanded)
- XXIV. Influence of T6 heat treatment on A356 and A380 aluminium alloys manufactured by thixoforging combined with low superheat casting  
GECÜ R., ACAR S., KISASÖZ A., ALTUG GULER K. A., KARAASLAN A.  
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- XXV. Relationship Between Nanoindentation and Wear Properties of Stainless Steel-Reinforced Aluminium Matrix Composite  
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- XXVI. Influence of preform preheating on dry sliding wear behavior of 304 stainless steel reinforced A356 aluminum matrix composite produced by melt infiltration casting  
GECÜ R., ATAPEK Ş. H., KARAASLAN A.  
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- XXVII. **Investigation of spherisation in microstructures of aluminium casting alloys for thixoforging process**  
GÜLER K. A., GECÜ R., KISASÖZ A., KARAASLAN A.  
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- XXVIII. **A Comparative Study on the Microstructure Evaluation of Thixoforged A356 and A380 Aluminium Alloys**  
GÜLER K. A., GECÜ R., KISASÖZ A., KARAASLAN A.  
PRAKTISCHE METALLOGRAPHIE-PRACTICAL METALLOGRAPHY, cilt.54, sa.3, ss.163-177, 2017 (SCI-Expanded)

## Düzenlenen Dergilerde Yayınlanan Makaleler

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- I. **Determination of Temperature Gradient in TIG Welding of Duplex Stainless Steel**  
KISASÖZ A., GECÜ R., KARAASLAN A.  
El-Cezerî Journal of Science and Engineering, cilt.4, ss.593-597, 2017 (Scopus)
- II. **Bimetal ve Geleneksel Olarak Üretilen Alüminyum Esaslı Metal-Metal Kompozitlerin Mekanik Özellikleri**  
Gecü R.  
Metalurji, sa.180, ss.26-30, 2016 (Hakemsiz Dergi)

## Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar

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- I. **Investigation And Characterization Of Duplex Stainless Steel Production By Mechanical Alloying Method**  
Örücü S., Birol B., Gecü R.  
International Marmara Sciences Congress (Imascon Autumn) 2022, Kocaeli, Türkiye, 9 - 10 Aralık 2022, ss.25
- II. **Influence of Heat Treatment of 1.4462 and 1.4501 Duplex Stainless Steels on Microstructure and Wear Resistance**  
YALÇINER G., GECÜ R., KISASÖZ A., KARAASLAN A.  
20th International Metallurgy and Materials Congress, İstanbul, Türkiye, 10 - 12 Haziran 2021, ss.316
- III. **Prevention of Hot Crack Formation in 304 Stainless Steel Reinforced AA7075 Aluminium Matrix Bimetal Composites**  
Gecü R., Karaaslan A.  
9th International Aluminium Symposium, İstanbul, Türkiye, 10 - 11 Ekim 2019, ss.34-38
- IV. **A Study on the Effects of Solution Heat Treatment Time on Eutectic Silicon Morphology for A380 Alloy**  
ACAR S., GECÜ R., KISASÖZ A., GÜLER K. A., KARAASLAN A.  
19th International Metallurgy and Materials Congress, İstanbul, Türkiye, 25 - 27 Ekim 2018, ss.304-306
- V. **Sliding Wear Characteristics of AISI 2205 Duplex Stainless Steel Cooled in Various Environments after Solution Treatment**  
GECÜ R., KISASÖZ A., KARAASLAN A.  
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- VI. **The impact of volume fraction of commercially pure titanium reinforcement on aluminium matrix bimetal composite properties**  
GENÇER K., GECÜ R., KARAASLAN A.  
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- VII. **TRIBOLOGICAL CHARACTERIZATION OF 304 STAINLESS STEEL REINFORCED AA7075 ALUMINIUM MATRIX COMPOSITE PRODUCED BY MELT INFILTRATION CASTING**  
GECÜ R., KARAASLAN A.  
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- VIII. **Investigation of the Effects of Solution Heat Treatmeant Time on the Eutectic Silicon for A356 Alloy**  
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- IX. **Dry Sliding Wear Properties of AA7075 Aluminium Matrix Hybrid Composites**  
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2. International Conference on Engineering Technology and Innovation (ICETI), Budapeşte, Macaristan, 07 Mart 2018, ss.295-300
- X. **The Effect of Preform Preheating on Microstructural and Mechanical Features of 80% CP-Ti Reinforced A356 Matrix Composite**  
GECÜ R., KARAASLAN A.  
International Conference on Engineering Technology and Innovation (ICETI), Budapeşte, Macaristan, 07 Mart 2018, ss.163-169
- XI. **Aging of A356 Aluminum Billets Produced by Semi-Solid Metal Processing**  
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3rd International Iron & Steel Symposium, Karabük, Türkiye, 03 Nisan 2017, ss.267-270
- XII. **Production of CP-Ti Reinforced A356 Aluminum Composite by Vacuum-Assisted Investment Casting**  
GECÜ R., KARAASLAN A.  
International Conference on Engineering Technology and Innovation, Saraybosna, Bosna-Hersek, 22 Mart 2017, ss.210-214
- XIII. **Microstructural Evaluation of T6-Treated A380 Alloy Manufactured by Semi-Solid Metal Casting**  
GECÜ R., ACAR S., KISASÖZ A., GÜLER K. A., KARAASLAN A.  
International Conference on Engineering Technology and Innovation, Sarajevo, Bosna-Hersek, 22 Mart 2017, ss.284-288
- XIV. **Manufacturing and Aging of 7075 Based Metal-Metal Composites by Using Sawdusts as Reinforcements**  
GECÜ R., KISASÖZ A., GÜLER K. A., KARAASLAN A.  
18th International Metallurgy & Materials Congress, İstanbul, Türkiye, 29 Eylül 2016, ss.114-117
- XV. **An Investigation of the Effect of Solution Heat Treatment on 475 °C Embrittlement in 1.4462 Duplex Stainless Steels**  
GECÜ R., KISASÖZ A., KARAASLAN A.  
18th International Metallurgy & Materials Congress, İstanbul, Türkiye, 29 Eylül 2016, ss.501-503
- XVI. **The Effect of Intermetallic Phases on Corrosion Behaviour of Duplex Stainless Steels**  
ZORBA A. P., ÖZYILMAZ A. Ö., GECÜ R., KISASÖZ A., KARAASLAN A.  
18th International Metallurgy & Materials Congress, İstanbul, Türkiye, 29 Eylül 2016, ss.836-839

## Desteklenen Projeler

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- I. GECÜ R., Yükseköğretim Kurumları Destekli Proje, Sıfıraltı İşlem Görmüş AISI H13 Sıcak İş Takım Çeliklerinde Temperlemenin Mikroyapı ve Aşınma Davranışına Etkisinin İncelenmesi, 2022 - 2023
- II. KARAASLAN A., GECÜ R., Yükseköğretim Kurumları Destekli Proje, Bimetal Kompozitlerin Metal Talaşlarıyla Üretimi ve Karakterizasyonu, 2017 - 2019
- III. KISASÖZ A., ACAR S., GECÜ R., KARAASLAN A., GÜLER K. A., Yükseköğretim Kurumları Destekli Proje, Isıya Dayanıklı 2.4879 Alaşımının Yüksek Sıcaklık Uygulamalarındaki Özellik Değişimlerinin Belirlenmesi, 2017 - 2019
- IV. KARAASLAN A., ACAR S., GECÜ R., KISASÖZ A., GÜLER K. A., Yükseköğretim Kurumları Destekli Proje, Geri Dönüşürlübilir Metal Takviyeler Kullanılarak Üretilen Alüminyum Matrisli Metal-Metal Kompozitlerin Aşınma Özelliklerinin Belirlenmesi, 2017 - 2019
- V. KARAASLAN A., ACAR S., KISASÖZ A., GECÜ R., GÜLER K. A., Yükseköğretim Kurumları Destekli Proje, Çift Fazlı Paslanmaz Çelikte Ferrit-Östenit Faz Dengesinin 475 °C Kırılganlığı Üzerindeki Etkisinin İncelenmesi, 2017 - 2019

## Bilimsel Hakemlikler

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- I. TRIBOLOGY INTERNATIONAL, SCI Kapsamındaki Dergi, Mart 2020
- II. INTERNATIONAL JOURNAL OF METALCASTING, SCI Kapsamındaki Dergi, Şubat 2019
- III. MATERIALS EXPRESS, SCI Kapsamındaki Dergi, Ağustos 2018
- IV. INTERNATIONAL JOURNAL OF METALCASTING, SCI Kapsamındaki Dergi, Haziran 2018
- V. TRIBOLOGY LETTERS, SCI Kapsamındaki Dergi, Eylül 2017

## Metrikler

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Yayın: 47

Atıf (WoS): 172

Atıf (Scopus): 213

H-İndeks (WoS): 8

H-İndeks (Scopus): 9

## Antrenörlük Görevleri

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## Hakemlik Görevleri

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