

Res. Asst. Mehmet Topuz

Personal Information

Office Phone: [+90 432 444 5065](tel:+904324445065) Extension: 28282

Fax Phone: [+90 432 225 1730](tel:+904322251730)

Email: mehmettopuz@yyu.edu.tr

Web: <https://avesis.yyu.edu.tr/mehmettopuz>

Address: Yüzüncü Yıl Üniversitesi, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, 65080 Zeve Kampüsü, VAN

Education Information

Doctorate, Ataturk University, Mühendislik Fakültesi, Makine Mühendisliği, Turkey 2017 - Continues

Post Graduate, Van Yüzüncü Yıl University, Mühendislik Fakültesi, Makine Mühendisliği, Turkey 2014 - 2016

Under Graduate, Erciyes University, Mühendislik Fakültesi, Makine Mühendisliği, Turkey 2007 - 2013

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Post Graduate, Beta (β)-Tipi Titanyum Alaşımları Üzerine Biyoaktif Hibrid Kaplamaların Üretilmesi, Karakterizasyonu ve İn-vitro Korozyon Özelliklerinin Araştırılması, Van Yüzüncü Yıl University, Fen Bilimleri Enstitüsü, Makine Mühendisliği, 2016

Research Areas

Mechanical Engineering, Construction and Manufacturing, Non-traditional manufacturing methods, Material, Corrosion and Corrosion Protection, Composites, Plating, Powder Metallurgy

Academic Titles / Tasks

Research Assistant, Van Yüzüncü Yıl University, Mühendislik Fakültesi, Makine Mühendisliği, 2014 - Continues

Professional Experience

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- Al-5Cu/B4Cp composites: The combined effect of artificially aging (T6) and particle volume fractions on the corrosion behaviour**
Tozkoparan B., Dikici B., Topuz M., Bedir F., Gavgalı M.
Advanced Powder Technology, vol.31, pp.2833-2842, 2020 (Journal Indexed in SCI)

- II. **Synthesis of biphasic calcium phosphate (BCP) coatings on β -type titanium alloys reinforced with rutile-TiO₂ compounds: adhesion resistance and in-vitro corrosion**
DİKİCİ B., Niinomi M., Topuz M., Koc S., Nakai M.
Journal of Sol-Gel Science and Technology, vol.87, pp.713-724, 2018 (Journal Indexed in SCI Expanded)
- III. **Synthesis and Characterization of Hydroxyapatite/TiO₂ Coatings on the beta-Type Titanium Alloys with Different Sintering Parameters using Sol-Gel Method**
DİKİCİ B., Niinomi M., Topuz M., Say Y., AKSAKAL B., YILMAZER H., Nakai M.
PROTECTION OF METALS AND PHYSICAL CHEMISTRY OF SURFACES, vol.54, pp.457-462, 2018 (Journal Indexed in SCI)
- IV. **Production of Annealed Cold-Sprayed 316L Stainless Steel Coatings for Biomedical Applications and Their in-vitro Corrosion Response**
DİKİCİ B., Topuz M.
PROTECTION OF METALS AND PHYSICAL CHEMISTRY OF SURFACES, vol.54, pp.333-339, 2018 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **Two simple methods for surface modification of lithium disilicate dental blocks with hydroxyapatite**
Topuz M., Dikici B.
Research on Engineering Structures and Materials, vol.6, pp.97-104, 2019 (Refereed Journals of Other Institutions)
- II. **A Review on the Hydrogels used in 3D Bio-printing**
Topuz M., DİKİCİ B., GAVGALI M., YILMAZER H.
International Journal of 3D Printing Technologies and Digital Industry, vol.2, no.2, pp.68-75, 2018 (Refereed Journals of Other Institutions)
- III. **Zirkonya Takviyeli Hidroksiapatit (HA) Bazlı Biyoaktif Hibrid Kaplamaların Korozyon Duyarlılıkları**
Topuz M., Dikici B., (Güngör) Koç S., YILMAZER H., Niinomi M., Nakai M.
Engineering Science, vol.12, pp.66-77, 2017 (Journal Indexed in ESCI)

Refereed Congress / Symposium Publications in Proceedings

- I. **Al-Cu Matrix Composites Reinforced with B₄C Particles: The Effect of T6 Heat Treatment on The Corrosion Behaviour**
TOZKOPARAN B., Dikici B., Topuz M., BEDİR F., GAVGALI M.
The International Aluminium-Themed Engineering And Natural Sciences Conference (IATENS 2019), Konya, Turkey, 4 - 06 October 2019, pp.52-55
- II. **Preparation of Hydroxyapatite/Chitosan Hybrid Coatings on β -Type Ti alloys and Theirs In-vitro Corrosion Resistance**
Topuz M., Dikici B., Niinomi M., YILMAZER H., Nakai M.
X International Symposium on Materials (MATERIAIS 2019), Lizbon, Portugal, 14 - 17 April 2019, pp.59
- III. **Al-5Cu/B₄Cp Hot-Pressed Composites: The Effect of Particle Volume Fraction on Microstructure and Corrosion Behavior**
Dikici B., TOZKOPARAN B., Topuz M., BEDİR F., GAVGALI M.
X International Symposium on Materials (MATERIAIS 2019), Lizbon, Portugal, 14 - 17 April 2019, pp.129
- IV. **A REVIEW ON THE HYDROGELS USED IN 3D BIOPRINTING**
Topuz M., DİKİCİ B., GAVGALI M., YILMAZER H.
3rd INTERNATIONAL CONGRESS ON 3D PRINTING TECHNOLOGIES AND DIGITAL INDUSTRY 2018, Antalya, Turkey, 19 - 21 April 2018, pp.135-138
- V. **Bioactive Surface Modification With Bioglass/Hydroxyapatite Of Biomedical Titanium Alloys And Their Beneficial Effect On Corrosion Resistance**

Topuz M., DİKİCİ B., Koç S., NAKAI M., NIINOMI M.

1st International Symposium on Light Alloys and Composite Materials, Karabük, Turkey, 22 - 24 March 2018, pp.317-318

- VI. **THE SYNTHESIS AND DETERMINATION OF MECHANICAL PROPERTIES OF METAL OXIDE-REINFORCED HYDROXYAPATITE BASED CERAMIC COATINGS**
Topuz M., Koç S., DİKİCİ B., NIINOMI M., NAKAI M., YILMAZER H.
2nd International Conference on Material Science and Technology in Cappadocia (IMSTEC 2017), Nevşehir, Turkey, 11 - 13 October 2017, pp.378
- VII. **SOL-GEL BIOACTIVE COATINGS ON α -TYPE TITANIUM ALLOYS FOR IMPROVEMENT OF BIOCOMPATIBILITY: CELL CULTURE RESPONSE**
Taşpınar M., Topuz M., Koç S., DİKİCİ B., NIINOMI M., NAKAI M.
2nd International Conference on Material Science and Technology in Cappadocia (IMSTEC 2017), Nevşehir, Turkey, 11 - 13 October 2017, pp.380
- VIII. **IN-VITRO CORROSION RESPONSES OF BIOACTIVE HYBRID COATINGS**
DİKİCİ B., NIINOMI M., Topuz M., Koç S., YILMAZER H., NAKAI M.
2nd International Conference on Material Science and Technology in Cappadocia (IMSTEC 2017), Nevşehir, Turkey, 11 - 13 October 2017, pp.379
- IX. **Comparison of corrosion behaviors of β -type Ti₂₉Nb₁₃Ta_{4.6}Zr alloys with α and α + β type titanium alloys**
DİKİCİ B., NIINOMI M., Topuz M., YILMAZER H., NAKAI M.
2nd International Conference on Advanced Engineering Technologies (ICADET 2017), Bayburt, Turkey, 21 - 23 September 2017, pp.1
- X. **Silver/Hydroxyapatite Hybrid Coatings on Ti-6Al-4V Surfaces by Sol-Gel Method**
DİKİCİ B., Koç S., Topuz M., NIINOMI M., NAKAI M.
European Congress and Exhibition on Advanced Materials and Processes (EUROMAT 2017), Thessaoniki, Greece, 17 - 22 September 2017, pp.1
- XI. **Structural characterization and in-vitro corrosion response of HA/TiO₂ composite coatings on Ti-6Al-4V**
Topuz M., DİKİCİ B., Koç S., NIINOMI M., NAKAI M.
20th International Corrosion Congress & Process Safety Congress 2017 (EUROCORR 2017), Prag, Czech Republic, 3 - 07 September 2017, pp.1-10
- XII. **The Effect of Hydroxyapatite Based Bioactive Coatings Reinforced with TiO₂ Particles on the Corrosion Resistance of Grade 2 CP Ti**
Topuz M., DİKİCİ B., (Güngör) Koç S., Niinomi M., Nakai M.
The 22nd Biomedical Science and Technology Symposium (BIOMED2017), Ankara, Turkey, 12 - 14 May 2017
- XIII. **Al-Cu metal matrisli kompozitlerin korozyon davranışı üzerine B4C partikül hacim oranı ve yaşlandırma işleminin birleşik etkisi**
TOZKOPARAN B., Dikici B., BEDİR F., Topuz M., GAVGALI M.
II. Savunma Sanayi Sempozyumu, Kırıkkale, Turkey, 6 - 08 April 2017, pp.1-8
- XIV. **PREPARATION AND CHARACTERIZATION OF CHITOSAN/HYDROXYAPATITE SOL-GEL COATING ON Ti-6Al-4V**
(Güngör) Koç S., Dikici B., Topuz M., YILMAZER H., OZDEMIR I., Niinomi M., Nakai M.
6th International Conference on Advanced Materials and Systems (ICAMS 2016), Bükreş, Romania, 20 - 22 October 2016, pp.1
- XV. **CORROSION SUSCEPTIBILITY OF HYDROXYAPATITE (HA) BASED ZIRCONIA REINFORCED BIOACTIVE HYBRID COATINGS**
Topuz M., Dikici B., (Güngör) Koç S., Yilmazer H., Nakai M., Niinomi M.
14. Uluslararası Korozyon Sempozyumu (KORSEM 2016), Bayburt, Turkey, 5 - 07 October 2016, pp.1-10
- XVI. **Zirkonya Takviyeli Hidroksiapatit (HA) Bazlı Biyoaktif Hibrid Kaplamaların Korozyon Duyarlılıkları**
Topuz M., Dikici B., (Güngör) Koç S., Yilmazer H., Nakai M., Niinomi M.
14. Uluslararası Korozyon Sempozyumu (KORSEM 2016), Bayburt, Turkey, 5 - 07 October 2016, pp.1-10

- XVII. **SYNTHESIS AND CHARACTERIZATION OF SOL GEL HYDROXYAPATITE COATINGS ON THE BETA TYPE TITANIUM ALLOYS THE EFFECT OF SINTERING CONDITIONS**
Dikici B., Topuz M., (Güngör) Koç S., Yilmazer H., Niinomi M.
3rd International Conference on Advanced Technology & Sciences (ICAT'16), Konya, Turkey, 1 - 03 September 2016, pp.295
- XVIII. **BETA (β)-TİPİ TİTANYUM ALAŞIMLARININ ELEKTROKİMYASAL KOROZYON DAVRANIŞI ÜZERİNE HYDROXYAPATİTE ESASLI BİYOAKTİF KAPLAMALARIN ETKİSİ**
Dikici B., Topuz M., (Güngör) Koç S., Yilmazer H., Niinomi M., Nakai M.
12. Ulusal Kimya Mühendisliği Kongresi UKMK2016, İzmir, Turkey, 23 - 26 August 2016, pp.419
- XIX. **Cold spray deposition of SS316L powders on Al5052 substrates and their potential using for biomedical applications**
Dikici B., Ozdemir I., Topuz M.
ICMSEM 2016 : 18th International Conference on Materials Science, Engineering and Manufacturing, Paris, France, 25 - 26 April 2016, vol.18, no.4, pp.2085-2089
- XX. **Some studies on hydroxyapatite based bioactive hybrid coatings reinforced with metal oxides**
Topuz M., Dikici B., Güngör S.
International Conference on Material Science and Technology in Cappadocia, Nevşehir, Turkey, 6 - 08 April 2016, pp.511-516
- XXI. **Metal Oksit Takviyeli Hidroksiapatit (HA) Bazlı Biyoaktif Hibrid Kaplamalar Üzerine Bazı Çalışmalar**
Topuz M., Dikici B., Güngör S.
International Conference on Material Science and Technology in Cappadocia, Nevşehir, Turkey, 6 - 08 April 2016, pp.511-516
- XXII. **Bankamatiklerde Gümüş Kaplamalı Antibakteriyel Tuş Takımı Kullanımı**
Topuz M., Topuz A.
Metalik Fikirler 4. Ar-Ge Proje Pazarı, İstanbul, Turkey, 8 - 10 October 2015, pp.65
- XXIII. **Beta (β)Tipi Titanyum Alaşımları Üzerine Biyoaktif Hibrid Kaplamaların Üretilmesi, Karakterizasyonu ve İnVitro Korozyon Özelliklerinin Araştırılması**
Topuz M.
Metalik Fikirler 4. Ar-Ge Proje Pazarı, İstanbul, Turkey, 8 - 10 October 2015, pp.46

Supported Projects

Gavgalı M., Dikici B., Topuz M., Project Supported by Higher Education Institutions, Biyomedikal uygulamalar için poroz yapılı titanyum/hidroksiapatit-ZrO₂p kompozitlerin soğuk izostatik presleme tekniği ile üretilebilirliğinin araştırılması, 2019 - 2020

Dikici B., Koç S., Taşpınar M., TUBITAK Project, Beta (β)-Tipi Titanyum Alaşımlarının Vücut Entegrasyonunu ve Biyoyumluluğunu İyileştirmek Amacıyla Sol-Jel Yüzey Modifikasyon İşlemleri ile Biyoaktif Hibrid Kaplamalar ile Kaplanması Ve Karakterizasyonu, 2014 - 2018

Dikici B., Topuz M., Project Supported by Higher Education Institutions, Beta tipi titanyum alaşımları üzerine biyoaktif hibrid kaplamaların üretilmesi, karakterizasyonu ve in-vitro korozyon özelliklerinin araştırılması, 2015 - 2016

Dikici B., Topuz M., Köseadağ E., BEDİR F., Project Supported by Higher Education Institutions, Al-Cu Matrisli Kompozitlerin Mekanik ve Korozif Özellikleri Üzerine Yaşlandırma Isıl İşlemi ve Kuvvetlendirici Faz Hacim Oranının Birleşik Etkisinin Araştırılması, 2015 - 2016

Scientific Refereeing

Proceedings Of The Institution Of Mechanical Engineers Part H-Journal Of Engineering In Medicine, SCI Journal, July 2020
TRANSACTIONS OF NONFERROUS METALS SOCIETY OF CHINA, SCI Journal, December 2019
Research on Engineering Structures and Materials, Other Indexed Journal, October 2019

Research on Engineering Structures and Materials, Other Indexed Journal, October 2018

Advances in Science, Technology and Engineering Systems Journal, Other Indexed Journal, September 2018

Proceedings Of The Institution Of Mechanical Engineers Part H-Journal Of Engineering In Medicine, SCI Journal, October 2017

Invited Congress and Symposium Activities

X International Symposium on Materials (MATERIAIS 2019), Attendee, Lisbon, Portugal, 2019

3rd International Congress on 3D Printing (Additive Manufacturing) Technologies and Digital Industry 2018, Attendee, Antalya, Turkey, 2018

1st International Symposium on Light Alloys and Composite Materials (ISLAC'18), Attendee, Karabük, Turkey, 2018

2nd International Conference on Material Science and Technology in Cappadocia (IMSTEC 2017), Panelists, Nevşehir, Turkey, 2017

2th International Conference on Material Science and Technology in Cappadocia (IMSTEC'2017), Attendee, Nevşehir, Turkey, 2017

2nd International Conference on Advanced Engineering Technologies (ICADET 2017), Attendee, Bayburt, Turkey, 2017

20th International Corrosion Congress & Process Safety Congress 2017 (EUROCORR2017), Attendee, Praha, Czech Republic, 2017

The 22nd Biomedical Science and Technology Symposium (BIOMED 2017), Attendee, Ankara, Turkey, 2017

XIV. International Corrosion Symposium (KORSEM 2016), Attendee, Bayburt, Turkey, 2016

3rd International Conference on Advanced Technology & Sciences (ICAT'16), Attendee, Konya, Turkey, 2016

12. Ulusal Kimya Mühendisliği Kongresi (UKMK 2016), Attendee, İzmir, Turkey, 2016

International Conference on Material Science and Technology in Cappadocia (IMSTEC'16), Attendee, Nevşehir, Turkey, 2016

Metalik Fikirler 4. Ar-Ge Proje Pazarı, Attendee, İstanbul, Turkey, 2015

Citations

Total Citations (WOS):10

h-index (WOS):2

Scholarships

2224-A Yurt Dışı Bilimsel Etkinliklere Katılımı Destekleme Programı, TÜBİTAK, 2019 - Continues

Awards

Topuz M., Yayın Teşvik (UBYT), TÜBİTAK ULAKBİM, March 2019