

# **Yasin ÖZGÜRLÜK**

Arş. Gör. Dr.

Metalurji ve Malzeme Mühendisliği

Bartın Üniversitesi

Tel.: +905445308062; E-posta: yozgurluk@bartin.edu.tr

## **EĞİTİM BİLGİLERİ:**

Doktora: (2016-halen devam ediyor) Metalurji ve Malzeme Ana Bilim Dalı, Metalurji ve Malzeme Mühendisliği Bölümü, Karabük Üniversitesi, Karabük, Türkiye.

Yüksek Lisans: (2016) Metalurji ve Malzeme Ana Bilim Dalı, Metalurji ve Malzeme Mühendisliği Bölümü, Bartın Üniversitesi, Bartın, Türkiye.

Lisans: (2011) Metalurji ve Malzeme Mühendisliği Bölümü, Karadeniz Teknik Üniversitesi, Trabzon, Türkiye.

## **ÜNVAN:**

2013-.....-Arş. Gör.              Metalurji ve Malzeme Mühendisliği Bölümü, Bartın Üniversitesi, Bartın, Türkiye

## **ONUR VE ÖDÜLLER:**

2011, Karadeniz Teknik Üniversitesi, Metalurji ve Malzeme Mühendisliği Bölümü, Bölüm üçüncüsü

## **YAYINLANMIŞ KİTAPLAR ve KİTAPLarda BÖLÜMLER:**

1. Karaoglanli, A. C., Doleker, K. M. and Ozgurluk, Y. (2017). "State of the Art Thermal Barrier Coating (TBC) Materials and TBC Failure Mechanisms. " In Properties and Characterization of Modern Materials (441-452). Springer Singapore.
2. Kaplan, M., Uyaner, M., Ozgurluk, Y., Doleker, K. M. and Karaoglanli, A. C. (2019). "Evaluation of Hot Corrosion Behavior of APS and HVOF Sprayed Thermal Barrier Coatings (TBCs) Exposed to Molten  $\text{Na}_2\text{SO}_4 + \text{V}_2\text{O}_5$  Salt at 1000° C. In Engineering Design Applications. " (pp. 441-459). Springer, Cham.
3. Unal, O., Karaoglanli, A. C., Ozgurluk, Y., Doleker, K. M., Maleki, E. and Varol, R. (2019). "Wear Behavior of Severe Shot Peened and Thermally Oxidized Commercially Pure Titanium." In Engineering Design Applications (pp. 461-470). Springer, Cham.

## **YAYINLANMIŞ MAKALELER (SCI indeks):**

1. Ozgurluk, Y., Doleker, K. M. and Karaoglanli, A. C. (2018). "Hot Corrosion Behavior of YSZ,  $\text{Gd}_2\text{Zr}_2\text{O}_7$  and YSZ/ $\text{Gd}_2\text{Zr}_2\text{O}_7$  Thermal Barrier Coatings Exposed to Molten Sulfate and Vanadate Salt." *Applied Surface Science* 438: 96-113.
2. Doleker, K.M., Ozgurluk, Y., Ozkan, D., Mesekiran, N. and Karaoglanli, A.C. (2018). "Comparison of Microstructures and Oxidation Behaviors of Yttria And Magnesia Stabilized Zirconia Thermal Barrier Coatings (TBC)." *Materiali in tehnologije* 52(3): 315-322.

3. Ozgurluk, Y., Doleker, K. M., Ahlatci, H. and Karaoglanli, A. C. (2018). "Investigation of hot corrosion behavior of thermal barrier coating (TBC) systems with rare earth contents." *Arabian Journal of Geosciences* 11(11): 267.
4. Doleker, K. M., Ozgurluk, Y. and Karaoglanli, A. C. (2018). "Isothermal oxidation and thermal cyclic behaviors of YSZ and double-layered YSZ/La<sub>2</sub>Zr<sub>2</sub>O<sub>7</sub> thermal barrier coatings (TBCs)." *Surface and Coatings Technology* 351: 78-88.
5. Doleker, K. M., Ozgurluk, Y., Parlakyigit, S., Ozkan, D., Gulmez, T. and Karaoglanli, A. C. (2018). "Oxidation Behavior of NiCr/YSZ Thermal Barrier Coatings (TBCs)." *Open Chemistry* (Accepted, In press).
6. Doleker, K. M., Ozgurluk, Y., Ahlatci, H. and Karaoglanli, A. C. (2018) "Isothermal Oxidation Behavior of Gadolinium Zirconate (Gd<sub>2</sub>Zr<sub>2</sub>O<sub>7</sub>) Thermal Barrier Coatings (TBCs) produced by Electron Beam Physical Vapor Deposition (EB-PVD) technique." *Open Chemistry* (Accepted Manuscript, In press).
7. Ozgurluk, Y., Doleker, K. M., Ahlatci, H., Ozkan, D. and Karaoglanli, A. C. (2018). "The Microstructural Behavior Investigation of Vermiculite-Infiltrated Electron Beam Physical Vapor Deposition Thermal Barrier Coatings." *Open Chemistry* (Accepted Manuscript, In press).

#### **YAYINLANMIŞ KONFERANS MAKALELERİ:**

1. Karaoglanli, A.C., Ozgurluk Y. and Doleker, K. M. (2016). "Microstructural Investigation of As Sprayed and Annealed CoNiCrAlY coating produced using Supersonic Atmospheric Plasma Spray (SAPS)." *2nd International Advanced and Functional Materials Technologies (AFMAT), Antalya, Türkiye.*
2. Doleker, K. M., Ozgurluk Y. and Karaoglanli, A.C. (2016). "Comparison of Isothermal Oxidation Behavior of CoNiCrAlY Coated and Uncoated Inconel 718 superalloys." *2nd International Advanced and Functional Materials Technologies (AFMAT), Antalya, Türkiye.*
3. Ozgurluk Y., Doleker, K. M. and Karaoglanli, A.C. (2016). "Fabrication and Oxidation Behavior of Detonation Gun Sprayed Ni based Super Alloy." *2nd International Advanced and Functional Materials Technologies (AFMAT), Antalya, Türkiye.*
4. Doleker, K. M., Ozgurluk Y. and Karaoglanli, A.C. (2016). "Oxidation Behavior of Yttria Stabilized Zirconia YSZ Thermal Barrier Coating (TBC) Produced by Electron Beam Physical Vapor Deposition EB PVD Technique." *2nd International Advanced and Functional Materials Technologies (AFMAT), Antalya, Türkiye.*
5. Ozgurluk Y., Doleker, K. M., Meşekiran, N. and Karaoglanli, A.C. (2016). "Microstructural Investigation of MgO Stabilized Zirconia Thermal Barrier Coatings (TBC)." *2nd International Advanced and Functional Materials Technologies (AFMAT), Antalya, Türkiye.*
6. Doleker, K. M., Ozgurluk Y. and Karaoglanli, A.C. (2017). "Isothermal oxidation and thermal cyclic behaviors of YSZ and YSZ/La<sub>2</sub>Zr<sub>2</sub>O<sub>7</sub> double-layered thermal barrier coatings (TBCs)." *10TH INTERNATIONAL CONFERENCE ON MATERIALS SCIENCE & ENGINEERING (Bramat 2017), Transilvanya, Romania.*
7. Ozgurluk Y., Doleker, K. M. and Karaoglanli, A.C. (2017). "Hot corrosion behavior of YSZ and Gd<sub>2</sub>Zr<sub>2</sub>O<sub>7</sub> thermal barrier coatings (TBCs) exposed to molten sulfate and vanadate salt." *Bramat 2017, Transilvanya, Romania.*

8. Doleker, K. M. and Karaoglanli, A.C. (2017). "Investigation of double-layered rare earth zirconates for thermal barrier coatings (TBCs) applications under isothermal oxidation conditions." 10TH INTERNATIONAL CONFERENCE ON MATERIALS SCIENCE & ENGINEERING (Bramat 2017), Transilvanya, Romanya.
9. Kaplan M., Uyaner M., Ozgurluk Y., Doleker, K. M. and Karaoglanli, A.C. (2017). "Evaluation of Hot Corrosion Behavior of APS and HVOF Sprayed Thermal Barrier Coatings (TBCs) Exposed to Molten  $\text{Na}_2\text{SO}_4+\text{V}_2\text{O}_5$  Salt at 1000 °C." 11th International Conference on Advanced Computational Engineering and Experimenting (ACE-X 2017), Vienna, Austria.
10. Doleker, K. M., Ozgurluk Y., Ahlatci H. and Karaoglanli, A.C. (2017). "Investigation of Oxidation Behavior at 1000 °C of Gadolinium Zirconate ( $\text{Gd}_2\text{Zr}_2\text{O}_7$ ) Thermal Barrier Coatings (TBCs) produced by Electron Beam Physical Vapor Deposition (EB-PVD) technique." 4th International Conference on Computational and Experimental Science and Engineering (ICCESEN-2017), Antalya, Türkiye.
11. Ozgurluk, Y., Doleker, K. M., Ahlatci H. and Karaoglanli, A.C. (2017). "Investigation of Hot Corrosion Behavior of Thermal Barrier Coating (TBC) Systems with Rare Earth Content" 4th International Conference on Computational and Experimental Science and Engineering (ICCESEN-2017), Antalya, Türkiye.
12. Doleker, K. M., Ozgurluk Y., Parlakyigit A.S., Ahlatci H. and Karaoglanli, A.C., (2017). "Oxidation Behavior of NiCr Bond Coated Thermal Barrier Coatings (TBCs) Produced with Atmospheric Plasma Spray (APS) Technique." 4th International Conference on Computational and Experimental Science and Engineering (ICCESEN-2017), Antalya, Türkiye.
13. Ozgurluk Y, Doleker, K. M., Ahlatci H. and Karaoglanli, A.C. (2017). "The Effect of Vermiculite on the Failure Mechanism of Electron Beam Physical Vapor Deposition (EB-PVD) Thermal Barrier Coatings (TBCs)." 4th International Conference on Computational and Experimental Science and Engineering (ICCESEN-2017), Antalya, Türkiye.
14. Ozgurluk Y, Doleker, K. M., Ahlatci H. and Karaoglanli, A.C., (2018) "Investigation of Hot Corrosion Resistance of Plasma Sprayed Thermal Barrier Coatings (TBCs) In Molten Salt Mixtures." The International Conference on Materials Science, Mechanical and Automotive Engineerings and Technology (IMSMATEC 2018), İzmir, Türkiye.
15. Ozgurluk Y, Doleker, K. M., Ahlatci H. and Karaoglanli, A.C. (2018) "Effect of Vermiculite Mineral on Thermal Barrier Coating (TBC) System at High Temperature Conditions." The International Conference on Materials Science, Mechanical and Automotive Engineerings and Technology (IMSMATEC 2018), İzmir, Türkiye.
16. Doleker, K. M., Ozgurluk Y., Ahlatci H. and Karaoglanli, A.C. (2018). "Lifetime Prediction of Thermal Barrier Coatings (TBCs)." 1st International Symposium on Light Alloys and Composite Materials (ISLAC 2018), Karabük, Türkiye.
17. Ozgurluk Y., Doleker, K. M., Ahlatci H. and Karaoglanli, A.C. (2018). "The effect of volcanic ash based damages on thermal barrier coatings during the service conditions." 1st International Symposium on Light Alloys and Composite Materials (ISLAC 2018), Karabük, Türkiye.

#### ARAŞTIRMA PROJELERİ:

1. Bursiyer, Gaz Türbinleri İçin Yenilikçi Kaplama Teknolojileri Kullanılarak Yeni Tip Termal Bariyer Kaplama TBC Malzemelerinin Geliştirilmesi İzotermal ve Termal Çevrim Oksidasyon Davranışlarının İncelenmesi, (TÜBİTAK 3501–TL 155500), 2014-2017.
2. Araştırmacı, CaO-MgO-Al<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub> (CMAS) Atağının Termal Bariyer Kaplamaların (TBCs) Yüksek Sıcaklık Davranışları Üzerindeki Etkisinin İncelenmesi, (BARTIN ÜNİ. BAP- TL 13828,42), 2017-2019.
3. Yardımcı Araştırmacı, Farklı İçeriklere Sahip Termal Bariyer Kaplama (TBC) Sistemlerinde Sıcak Korozyon ve CaO-MgO-Al<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub> (CMAS) Etkisinin İncelenmesi (KARABÜK ÜNİ. BAP- TL 30000), 2016-.....
4. Danışman, Oksit İçerikli termal Sprey Kaplamaların Sıcak Korozyon Davranışlarının İncelenmesi, (TÜBİTAK 2209 – TL 1156), 2015-2017.