

## Prof. Nurhan CANSEVER

### Personal Information

**Office Phone:** [+90 212 383 4680](tel:+902123834680)

**Email:** [cansev@yildiz.edu.tr](mailto:cansev@yildiz.edu.tr)

**Web:** <https://avesis.yildiz.edu.tr/cansev>

**Address:** YTÜ Kimya-Metalurji Fakültesi, Metalurji ve Malzeme Müh. Bölümü, Davutpaşa Kampüsü 34220 Esenler-İSTANBUL

### Education Information

Doctorate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Malzeme, Turkey 1983 - 1993

Postgraduate, Istanbul Technical University, Nükleer Enerji Enstitüsü, Malzeme, Turkey 1981 - 1983

Undergraduate, Istanbul Technical University, Metalurji Fakültesi, Metalurji Mühendisliği, Turkey 1975 - 1980

### Certificates, Courses and Trainings

Occupational Health and Safety, İş Sağlığı ve Güvenliği, Yıldız Teknik Üniversitesi, 2019

### Research Areas

Metallurgical and Materials Engineering, Material science and engineering, Corrosion and Corrosion Protection, Engineering and Technology

### Academic Titles / Tasks

Professor, Yildiz Technical University, Faculty Of Chemical And Metallurgical Engineering, Metalurji Ve Malzeme Mühendisliği, 2003 - Continues

### Courses

Corrosion and Protection, Undergraduate, 2019 - 2020

### Advising Theses

CANSEVER N., Ön İşlemlenmiş Akımsız Nikel ve Bor Nitrid Takviyeli Akımsız Nikel Kaplanmış Anodize Lüminyum Yüzeylerin Özellikleri, Doctorate, m.kocabaş(Student), 2017

CANSEVER N., Comparison of Different Nitriding Methods on Surface Properties of DIN 1.2738 Steel, Postgraduate, e.boztepe(Student), 2015

CANSEVER N., Gaz Nitridlemede Yıkama Kimyasallarının Yüzey Nitridleme Özelliklerine Etkisinin İncelenmesi, Postgraduate, m.emin(Student), 2014

CANSEVER N., Plazmonik Davranış Gösteren Metal-Dielktrik Nano-Kompozit Filmlerin Atomik Kaplama Metodu ile Üretilmesi ve Karakterizasyonu, Postgraduate, s.güleç(Student), 2014

CANSEVER N., Elektrolitik Sert Krom Kaplanmış 1010 ve 1040 Çelik Yüzeylerin Nitrürülenmesi ve Nitrokarbürülenmesi, Postgraduate, m.kocabaş(Student), 2012

CANSEVER N., AISI 1010 ve AISI 1040 Çeliklerine Nikel ve Krom Yayıdırılarak Yüzey Özelliklerinin Geliştirilmesi,, Postgraduate, c.altakan(Student), 2011

CANSEVER N., Manyetik Alanda Sıçratma Yöntemiyle Üretilen Ni-Cr Alaşımlarının Gerinim Ölçerlerde Kullanımı ve Uygulaması, Doctorate, m.danışman(Student), 2011

CANSEVER N., Doğalgaz ve Petrol Boruhattı Çeliklerinin Hidrojen Nedenli Çatlama Davranışı,, Doctorate, a.uysal(Student), 2010

CANSEVER N., Bakır Metalindeki Mikrobiyolojik Korozyonun Elektrokimyasal Yöntemlerle Araştırılması, Postgraduate, m.onan(Student), 2010

CANSEVER N., Titanyumun Dental Uygulamaları için Yüzey Modifikasyonu, Postgraduate, r.karadaş(Student), 2008

CANSEVER N., 316L Ostenitik Paslanmaz Çeliği ile Ti-6Al-4V Alaşımının Plazma Nitrürülenmesi, Postgraduate, a.sorkun(Student), 2006

CANSEVER N., Nikel-Titanyum Şekil Bellekli Alaşım Üretimi ve Şekil Bellek Eğitimi, Doctorate, s.dilibal(Student), 2005

CANSEVER N., Katodik Ark PVD Yöntemiyle ZrN ve Zr/ZrN Kaplamaların Biriktirilmesi, Postgraduate, m.çalışkan(Student), 2005

CANSEVER N., Yarıiletken Uygulamaları İçin Geleneksel Yöntemlerle NiSi Üretim Koşullarının Belirlenmesi, Postgraduate, M.Danışman(Student), 2003

CANSEVER N., Ark-PVD Yöntemiyle Biriktirilen NbN Kaplamalar ve Özellikleri, Postgraduate, i.a.yeş(Student), 2003

CANSEVER N., Plazma Püskürtme ve Uygulama Alanları, Postgraduate, H.Sezgin(Student), 2002

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Crystallization and additional oxide interlayers improve the tribocorrosion resistance of TiO<sub>2</sub> nanotubular surfaces formed on Ti6Al4V**  
Çaha I., TÜRÜ İ. C., Erdoğan E., Pinto A. M., CANSEVER N., Deepak F. L., Toptan F., Alves A. C.  
Applied Surface Science, vol.635, 2023 (SCI-Expanded)
- II. **Formation of TiO<sub>2</sub> nanotubes and deposition of silver nanoparticle and reduced graphene oxide: Antibacterial and biocompatibility behavior**  
TÜRÜ İ. C., Bayraktar S., Akgul B., İlhan-Sungur E., ABAMOR E. Ş., CANSEVER N.  
Surface and Coatings Technology, vol.470, 2023 (SCI-Expanded)
- III. **Biofilm Formation of Escherichia coli on Hydrophobic Steel Surface Provided by Laser-Texturing: Investigation of modified surfaces to prevent biofilm formation**  
Arkan-Ozdemir S., CANSEVER N., İlhan-Sungur E.  
Johnson Matthey Technology Review, vol.67, no.2, pp.186-196, 2023 (SCI-Expanded)
- IV. **Processing and Characterization of Al-4Cu Matrix Composites Reinforced with Few Layered Graphene**  
Kaykılarlı C., Kucukelyas B., Akcamli N., UZUNSOY D., CANSEVER N.  
TRANSACTIONS OF THE INDIAN INSTITUTE OF METALS, vol.75, no.9, pp.2379-2388, 2022 (SCI-Expanded)
- V. **A comparative analysis of perforation and blister features on internally corroded aged water pipeline wall**  
Martinez S., İlhan-Sungur E., CANSEVER N., Khoshnaw F.  
MATERIALS AND CORROSION-WERKSTOFFE UND KORROSION, vol.73, no.8, pp.1193-1204, 2022 (SCI-Expanded)
- VI. **The influence of Ag-Cu ions on natural biofilms of variable ages: Evaluation of MIC**  
Unsal T., CANSEVER N., İlhan-Sungur E.  
BIOELECTROCHEMISTRY, vol.146, 2022 (SCI-Expanded)
- VII. **Anodization of Ti6Al4V in Water-Ethylene Glycol Solution Containing NH<sub>4</sub>F and Its Corrosion Behavior in Ringer's Solution**  
TÜRÜ İ. C., CANSEVER N.  
INTERNATIONAL JOURNAL OF ELECTROCHEMICAL SCIENCE, vol.17, no.6, 2022 (SCI-Expanded)

- VIII. **Impact of commonly used Ag-Cu ion doses on Desulfovibriosp.: growth and microbiologically induced corrosion against stainless steel**  
Arkan-Ozdemir S., Cansever N., Ilhan-Sungur E.  
WATER SCIENCE AND TECHNOLOGY, vol.82, no.5, pp.940-953, 2020 (SCI-Expanded)
- IX. **INVESTIGATION OF POROUS ANODIC FILM FORMATION ON AA1050 BY ELECTROCHEMICAL IMPEDANCE SPECTROSCOPY**  
Danisman M., Kocabas M., Curioni M., Cansever N.  
Surface Review and Letters, vol.27, no.8, 2020 (SCI-Expanded)
- X. **Nickel fluoride as a surface activation agent for electroless nickel coating of anodized AA1050 aluminum alloy**  
Kocabaş M., ÖRNEK C., Curioni M., CANSEVER N.  
SURFACE & COATINGS TECHNOLOGY, vol.364, pp.231-238, 2019 (SCI-Expanded)
- XI. **Impact of biofilm in the maturation process on the corrosion behavior of galvanized steel: long-term evaluation by EIS**  
Unsal T., CANSEVER N., Ilhan-Sungur E.  
WORLD JOURNAL OF MICROBIOLOGY & BIOTECHNOLOGY, vol.35, no.2, 2019 (SCI-Expanded)
- XII. **A comparative investigation of the corrosion and tribocorrosion behaviour of nitrocarburized, gas nitrated, fluidized-bed nitrated, and plasma nitrated plastic mould steel**  
Bortepe E., Alves A. C., Ariza E., Rocha L. A., Cansever N., Toptan F.  
SURFACE & COATINGS TECHNOLOGY, vol.334, pp.116-123, 2018 (SCI-Expanded)
- XIII. **Isolation of a sulfide-producing bacterial consortium from cooling tower water: Evaluation of corrosive effects on galvanized steel**  
Ilhan-Sungur E., Özüölmez D., Cotuk A., CANSEVER N., MUYZER G.  
ANAEROBE, vol.43, pp.27-34, 2017 (SCI-Expanded)
- XIV. **Corrosive Metabolic Activity of Desulfovibrio sp on 316L Stainless Steel**  
Arkan S., Ilhan-Sungur E., CANSEVER N.  
JOURNAL OF MATERIALS ENGINEERING AND PERFORMANCE, vol.25, no.12, pp.5352-5362, 2016 (SCI-Expanded)
- XV. **Effects of Ag and Cu ions on the microbial corrosion of 316L stainless steel in the presence of Desulfovibrio sp.**  
Unsal T., Ilhan-Sungur E., Arkan S., CANSEVER N.  
BIOELECTROCHEMISTRY, vol.110, pp.91-99, 2016 (SCI-Expanded)
- XVI. **A comparative study on the dry sliding wear behaviour of nitrocarburised, gas nitrated, fluidised-bed nitrated, and plasma nitrated plastic mould steel**  
Boztepe E., Alves A. C., Ramalho A., Ariza E., Rocha L. A., CANSEVER N., Toptan F.  
INTERNATIONAL JOURNAL OF SURFACE SCIENCE AND ENGINEERING, vol.10, no.5, pp.468-484, 2016 (SCI-Expanded)
- XVII. **Microbiologically influenced corrosion of galvanized steel by Desulfovibrio sp and Desulfosporosinus sp in the presence of Ag-Cu ions**  
Ilhan-Sungur E., Ünsal-İstek T., CANSEVER N.  
MATERIALS CHEMISTRY AND PHYSICS, vol.162, pp.839-851, 2015 (SCI-Expanded)
- XVIII. **Diffusion characteristics of plasma nitrated hard chromium on AISI 1010 steel**  
Danisman M., Kocabas M., Cansever N.  
MATERIALS TESTING, vol.57, no.5, pp.443-446, 2015 (SCI-Expanded)
- XIX. **The corrosion behaviour of galvanized steel in cooling tower water containing a biocide and a corrosion inhibitor**  
Minnos B., Ilhan-Sungur E., Cotuk A., Gungor N. D., CANSEVER N.  
BIOFOULING, vol.29, no.3, pp.223-235, 2013 (SCI-Expanded)
- XX. **Effect of Cr content on mechanical and electrical properties of Ni-Cr thin films**  
Danisman M., CANSEVER N.  
JOURNAL OF ALLOYS AND COMPOUNDS, vol.493, pp.649-653, 2010 (SCI-Expanded)
- XXI. **The effect of nitrogen pressure on cathodic arc deposited NbN thin films**

- CANSEVER N., Danisman M., Kazmanli K.  
SURFACE & COATINGS TECHNOLOGY, vol.202, no.24, pp.5919-5923, 2008 (SCI-Expanded)
- XXII. **Microbial corrosion of galvanized steel by a freshwater strain of sulphate reducing bacteria (Desulfovibrio sp.)**  
Ilhan-Sungur E., Cansever N., Cotuk A.  
CORROSION SCIENCE, vol.49, no.3, pp.1097-1109, 2007 (SCI-Expanded)
- XXIII. **Properties of niobium nitride coatings deposited by cathodic arc physical vapor deposition**  
CANSEVER N.  
THIN SOLID FILMS, vol.515, pp.3670-3674, 2007 (SCI-Expanded)
- XXIV. **Examination of tarnish films formed during SCC of alpha-brass in ammoniacal solutions**  
Arslan F., Cansever N., Duby P.  
PRAKTISCHE METALLOGRAPHIE-PRACTICAL METALLOGRAPHY, vol.38, no.4, pp.175-188, 2001 (SCI-Expanded)
- XXV. **Inhibition of stress corrosion cracking of AISI 304 stainless steel by molybdate ions at elevated temperatures under salt crust**  
CANSEVER N., Cakir A., Urgen M.  
CORROSION SCIENCE, vol.41, no.7, pp.1289-1303, 1999 (SCI-Expanded)
- XXVI. **New Accelerated Test for Studying the Susceptibility of Stainless Steel to Chloride Stress Corrosion Cracking Under Salt Crust**  
CANSEVER N.  
CORROSION SCIENCE, vol.38, no.11, pp.2043-2048, 1996 (SCI-Expanded)
- XXVII. **Fractographic Observation on Chloride Stress Corrosion Cracking of Type 304 Stainless Steel under Salt Crust**  
CANSEVER N.  
Practical Metallography, vol.33, no.8, pp.421-430, 1996 (SCI-Expanded)

### Articles Published in Other Journals

- I. **INVESTIGATION OF THE EFFECT OF BIOFILM FORMATION ON THE BIOCORROSION OF GALVANIZED STEEL BY ELECTROCHEMICAL METHODS**  
UNSAL T., ILHAN-SUNGUR E., CANSEVER N.  
Engineering Sciences, vol.12, pp.149-157, 2017 (Peer-Reviewed Journal)
- II. **Effect of Sr and Ti Addition on the Corrosion Behaviour of Al-7Si-0.3Mg Alloy**  
Uludag M., Kocabaş M., Dışpınar D., Çetin R., CANSEVER N.  
ARCHIVES OF FOUNDRY ENGINEERING, vol.17, no.2, pp.125-130, 2017 (ESCI)
- III. **Effect of plasma nitriding time on surface properties of hard chromium electroplated AISI 1010 steel**  
CANSEVER N.  
Materials Testing, vol.57, no.5, pp.437-442, 2015 (Peer-Reviewed Journal)

### Refereed Congress / Symposium Publications in Proceedings

- I. **Investigation of TiO<sub>2</sub> Nanotubes Formation on the Surface of Pure Ti and Ti6Al4V Alloy**  
Türü İ. C., Cansever N.  
The European Corrosion Congress, EUROCORR 2019, Sevilla, Spain, 9 - 13 September 2019, pp.10-15
- II. **ELECTROCHEMICAL BEHAVIOR OF Ti6Al4V ALLOY IN SALT WATER AND SIMULATED BODY FLUID**  
TÜRÜ İ. C., TEPE S. A., YAYLI A., CANSEVER N.  
KORSEM 2018, Hatay, Turkey, 26 - 28 September 2018, pp.382-388
- III. **Effect of Voltage and Charge Densities on Nanoporous Oxide Pore Diameter on AA1050**  
ŞAŞMAZ CANSEVER N.  
IMMC 2018- 19th International Metallurgy and Materials Congress, İstanbul, Turkey, 25 October 2018, pp.1216-

- IV. **Anodic Oxidation Behavior of Sputtered Titanium Thin Films**  
TÜRÜ İ. C., TEPE S. A., DANIŞMAN M., CANSEVER N.  
EUROCORR 2018 Applied Science with constant Awareness, Krakow, Poland, 9 - 13 September 2018
- V. **Investigation of Microstructural and Mechanical Properties of Graphene Reinforced Al-4Cu Composites**  
KAYKILARLI C., KÜÇÜK ELYAS B., AKÇAMLI N., UZUNSOY D., CANSEVER N.  
ICETI-II. International Conference on Engineering Technology of Innovation, Budapeşte, Hungary, 07 March 2018, pp.75-80
- VI. **Investigation of Anti-adhesivity Property of 630 Steel with Laser Textured Surface**  
ÇELEBİ B. N., KOCABAŞ İ., ALTAN O., ARKAN S., ILHAN-SUNGUR E., CANSEVER N.  
EUROCORR 2017 The Annual Congress of the European Federation of Corrosion 20th INTERNATIONAL CORROSION CONGRESS & Process Safety Congress 2017, Prag, Czech Republic, 03 September 2017, pp.118-122
- VII. **Surface properties investigation of Ni-P-BN (h) coatings on 1050 aluminium substrate with nanostructured anodic oxide interlayer**  
Kocabaş M., Curioni M., CANSEVER N.  
EUROCORR 2017 The Annual Congress of the European Federation of Corrosion 20th INTERNATIONAL CORROSION CONGRESS & Process Safety Congress 2017, Prag, Czech Republic, 03 September 2017, pp.1-6
- VIII. **The effect of Fusarium sp. on microbial corrosion behavior of galvanized steel**  
KADAİFÇİLER D., UNSAL T., ARSLAN D., ILHAN-SUNGUR E., CANSEVER N.  
EUROCORR 2017 The Annual Congress of the European Federation of Corrosion 20th INTERNATIONAL CORROSION CONGRESS & Process Safety Congress 2017, Prag, Czech Republic, 03 September 2017, pp.345-350
- IX. **Efficacy of silver-copper ions in controlling microbial corrosion related with mixed-species biofilm**  
UNSAI T., ILHAN-SUNGUR E., CANSEVER N.  
EUROCORR 2017 The Annual Congress of the European Federation of Corrosion 20th INTERNATIONAL CORROSION CONGRESS & Process Safety Congress 2017, Prag, Czech Republic, 03 September 2017, pp.175-178
- X. **The role of biofilm in maturation process on microbial corrosion of galvanized steel**  
UNSAI T., ILHAN-SUNGUR E., CANSEVER N.  
EUROCORR 2017 The Annual Congress of the European Federation of Corrosion 20th INTERNATIONAL CORROSION CONGRESS & Process Safety Congress 2017, Prag, Czech Republic, 03 September 2017, pp.130-140
- XI. **A357 Alaşımında modifikasyon, tane İnceltme ve döküm kalitesinin korozyon davranışına etkisi**  
KOCABAŞ M., Kuru C., Uludağ M., Dışpınar D., Cansever N.  
7. Alüminyum Sempozyumu. ALUS '07, 01 October 2015
- XII. **Corrosion Behavior of B4C-Reinforced AZ91D Matrix Composites**  
KOCABAŞ M., KERTİ İ., ÇAVUŞOĞLU Ü., CANSEVER N.  
EURUCORR 2013 European Corrosion Congress, 1 - 05 September 2013
- XIII. **Optik sensörlerde kullanılan metal-dielektrik nano katmanlı filmlerin spektral ve geometrik optimizasyonu**  
CANSEVER N.  
NANOKON\12 II. Ulusal Nanoteknoloji Kongresi, 27-28 Eylül 2012, 01 September 2012
- XIV. **Effect of plasma nitriding of electroplated chromium coatings on the corrosion protection AISI 1010 steel**  
CANSEVER N.  
EUROCORR 2012-The European Corrosion Congress 9-13 September, Istanbul-TURKEY, 01 September 2012
- XV. **Investigation of corrosion behavior of galvanized steel by Desulfosporosinus sp. and Desulfovibrio sp. isolated from cooling tower water**  
CANSEVER N.  
EUROCORR 2012-The European Corrosion Congress 9-13 September, Istanbul-TURKEY, 01 September 2012
- XVI. **Dispersion maps of layered alumina-aluminum plasmonic structures**  
CANSEVER N.  
NanoTR8 - 25 June 2012, 01 June 2012

**XVII. Sensitivity enhancement of coupled plasmon-waveguide resonance sensors with gold-silver-alumina layers**

CANSEVER N.

Nanophotonics IV 15-19 april 2012, Brussels-BELGIUM, 01 April 2012

### **Supported Projects**

CANSEVER N., Project Supported by Higher Education Institutions, SAF NİYOBYUMUN TUZLU SU VE SÜLFÜRİK ASİT ORTAMLARINDA ANODİK OKSİDASYONU VE OKSİTLERİN KARAKTERİZASYONU, 2018 - 2018

CANSEVER N., DİNÇER O., Project Supported by Higher Education Institutions, Kitosan-poliüretan esaslı bileşimlerin çelik ve alüminyum altlıklar yüzeyindeki kendini iyileştirme özelliklerinin incelenmesi, 2016 - 2018

CANSEVER N., Project Supported by Higher Education Institutions, Ön İşlemlenmiş Akımsız Nikel ve Bor Nitrid Takviyeli Akımsız Nikel Kaplanmış Anodize Alüminyum Yüzeylerin Özellikleri, 2014 - 2017

CANSEVER N., Project Supported by Higher Education Institutions, 1.2738 Çeliğine Uygulanan Farklı Nitritleme Yöntemlerinin Çelik Yüzey Özelliklerine Etkisi, 2012 - 2015

CANSEVER N., Project Supported by Higher Education Institutions, 1010 Ve 1040 Çelik Yüzeylerine Farklı Elementler Yayıdırarak Korozyona Ve Aşınmaya Dayanıklı Hale Getirilmesi., 2009 - 2012

CANSEVER N., Project Supported by Higher Education Institutions, Mikroelektronik teknolojisinde kullanılan nikel silisitlerin hızlı ısı işlem prosesi ile üretimi, yapısal ve elektronik karakterizasyonu, 2004 - 2007

CANSEVER N., Project Supported by Higher Education Institutions, Galvanizli Çelik Saçların Mikrobiyolojik Korozyonunda Sülfat İndirgeyen Bakterilerin Rolü, 2005 - 2006

### **Metrics**

Publication: 48

Citation (WoS): 207

Citation (Scopus): 254

H-Index (WoS): 8

H-Index (Scopus): 9

### **Congress and Symposium Activities**

eurocorr 2017-20th international corrosion congre/ Surface properties investigation of Ni-P-BN(h) coatings on 1050 aluminum substrate with nanostructured anodic oxide interlayer, Attendee, Praha, Czech Republic, 2017