



# FATİH APAYDIN

## ASSOC. PROF.

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Fakültesi Metalurji ve Malzeme Mühendisliği Bölümü C310  
Bilecik / Türkiye

### International Researcher IDs

ScholarID: bcvuVG4AAAAJ

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Publons / Web Of Science ResearcherID: L-5397-2017

ScopusID: 8242088700

Yoksis Researcher ID: 46156



### Education

Doctorate	Sakarya University, Fen Bilimleri Enstitüsü, Metalurji Ve Malzeme Mühendisliği
2005 - 2010	(Dr), Turkey
Postgraduate	Sakarya University, Fen Bilimleri Enstitüsü, Metalurji Ve Malzeme Mühendisliği
2002 - 2004	(Yıl) (Tezli), Turkey
Undergraduate	Sakarya University, Faculty Of Engineering, Department Of Metallurgical And
1996 - 2001	Materials Engineering, Turkey

### Foreign Languages

English, B2 Upper Intermediate

### Certificates, Courses and Trainings

Vocational Training, Rigaku Smartlab X-Ray Diffractometer kullanıcı eğitimi, TEKSER A.Ş , Rigaku, 2014

### Dissertations

Doctorate, INVESTIGATION OF THE EFFECT OF MECHANICAL ACTIVATION ON THE CARBOTHERMAL REDUCTION OF CHROMITE FROM MUGLA REGION , Sakarya University, Fen Bilimleri Enstitüsü, Metalurji Ve Malzeme Mühendisliği (Dr), 2010

## Academic Positions

Associate Professor 2020 - Continues	Bilecik Seyh Edebali University, Mühendislik Fakültesi, Metalurji Ve Malzeme Mühendisliği
Assistant Professor 2015 - 2020	Bilecik Seyh Edebali University, Mühendislik Fakültesi, Metalurji Ve Malzeme Mühendisliği
Assistant Professor 2010 - 2015	Bartin University, Mühendislik Fakültesi, Metalurji ve Malzeme Mühendisliği
Lecturer 2002 - 2010	Kütahya Dumlupınar University, Kütahya Meslek Yüksekokulu, Makine

## Funded Projects

- APAYDIN F., Project Supported by Higher Education Institutions, Al<sub>2</sub>O<sub>3</sub> ve ZrO<sub>2</sub> Katkılı Silisyum Karbür Plakanın Sinterleme Davranışının İncelenmesi ve Karakterizasyonu, 2020 - 2022

## Journal articles indexed in SCI, SSCI, and AHCI

- The Effect of Strontium Content on the Corrosion Behavior of New Biodegradable Mg-1Ca-1Y Composite for Implant Application**  
ÖTEYAKA M. Ö., APAYDIN F., Apaydin S.  
Powder Metallurgy and Metal Ceramics, vol.61, no.1-2, pp.107-118, 2022 (SCI-Expanded)
- Low temperature formation of barium titanate in solid state reaction by mechanical activation of BaCO<sub>3</sub> and TiO<sub>2</sub>**  
APAYDIN F., Tun Parlak T., Yıldız K.  
Materials Research Express, vol.6, no.12, 2019 (SCI-Expanded)
- Formation of SrTiO<sub>3</sub> in mechanically activated SrCO<sub>3</sub>-TiO<sub>2</sub> system**  
Tunç Parlak T., APAYDIN F., Yıldız K.  
Journal of Thermal Analysis and Calorimetry, vol.127, no.1, pp.63-69, 2017 (SCI-Expanded)
- Structural alterations and thermal behaviour of mechanically activated alunite ore**  
Tunç T., APAYDIN F., Yıldız K.  
Journal of Thermal Analysis and Calorimetry, vol.118, no.2, pp.883-889, 2014 (SCI-Expanded)
- Effect of mechanical activation on manganese extraction from manganese carbonate ore in acidic media**  
Yılmaz V. M., APAYDIN F.  
Indian Journal of Chemical Technology, vol.21, no.3, pp.215-219, 2014 (SCI-Expanded)
- Effects of mechanical activation on the structure of nickeliferous laterite**  
Tunc T., APAYDIN F., Yıldız K.  
Acta Physica Polonica A, vol.123, no.2, pp.349-351, 2013 (SCI-Expanded)
- Effect of mechanical activation on carbothermal reduction of chromite with graphite**

- APAYDIN F., Atasoy A., Yıldız K.  
Canadian Metallurgical Quarterly, vol.50, no.2, pp.113-118, 2011 (SCI-Expanded)
8. **The effect of CuO on the grain growth of ZnO**  
APAYDIN F., Toplan H. Ö., Yıldız K.  
Journal of Materials Science, vol.40, no.3, pp.677-682, 2005 (SCI-Expanded)

## Articles Published in Other Journals

1. **Comparison of electrical properties of ZnO-Bi<sub>2</sub>O<sub>3</sub>-based ceramics prepared by conventional and spark plasma sintering (SPS) methods**  
APAYDIN F., Çelik A., Kara F., Toplan H. Ö.  
Journal of the Australian Ceramic Society, vol.58, no.3, pp.831-839, 2022 (Scopus)
2. **Comparison of Electrical Properties of Rare Earth Elements Doped ZnO-Based Varistor**  
APAYDIN F., ÇELİK A., ÇELİK Y.  
Bilecik Şeyh Edebali Üniversitesi Fen Bilimleri Dergisi, vol.6, no.2, pp.415-423, 2019 (Peer-Reviewed Journal)
3. **Formation of Al-Ti-B Phases for Grain Refinement of Al Alloys Produced by High Energy Ball Milling**  
ARIKOĞLU M., APAYDIN F., ÖZER A.  
MATERIALS SCIENCE FORUM, vol.907, pp.188-192, 2017 (Peer-Reviewed Journal)
4. **Çimento Döner Fırınlarında Kullanılan Bazik Refrakter Tuğlaların Özelliklerinin Karşılaştırılması**  
KAYA K., APAYDIN F.  
SAKARYA UNIVERSITY JOURNAL OF SCIENCE, vol.21, no.5, pp.1088-1094, 2017 (Peer-Reviewed Journal)
5. **Malahit Cevherinin Amonyum Nitrat ile Liç Edilmesine Mekanik Aktivasyonun Etkisinin İncelenmesi**  
Akçay M., APAYDIN F.  
Afyon Kocatepe University Journal of Sciences and Engineering, vol.17, no.2, pp.717-726, 2017 (Peer-Reviewed Journal)
6. **Phase and Morphological Evaluation of Mechanically Activated Sintered YAG Powders**  
ÖKSÜZ K. E., APAYDIN F., Bozdağ E., Çevik M., ÖZER A.  
Procedia Materials Science, vol.11, pp.44-48, 2015 (Peer-Reviewed Journal)
7. **Determining of Deformation on The Ceramics Using Fuzzy Logic**  
UÇAR A., GÜLBANDILAR E., APAYDIN F., KUT U.  
e-Journal of New World Sciences Academy, vol.6, no.1, pp.126-131, 2011 (Peer-Reviewed Journal)
8. **Effects of Mechanical activation on the carbothermal reduction of chromite with metallurgical coke**  
APAYDIN F., ATASOY A., YILDIZ K.  
SAKARYA UNIVERSITY JOURNAL OF SCIENCE, vol.14, no.1, pp.33-38, 2010 (Peer-Reviewed Journal)

## Books

1. **Batı Karadeniz Gemi İnşa ve Entegre Sanayii Sektör Analizi**  
GÜNDÖĞAN M., CEYHAN M. S., KARAYILMAZLAR S., KÜÇÜKÖNDER H., KIRMACI V., APAYDIN F., KASAPOĞLU C., ALKAN S., KURT R., ALTIN S., et al.  
BARTIN ÜNİVERSİTESİ Yayınları, Bartın, 2013
2. **Batı Karadeniz gemi inşa ve entegre sanayii sektör analizi**  
GÜNDÖĞAN M., KARAYILMAZLAR S., KÜÇÜKÖNDER H., APAYDIN F., CEYHAN M. S., KIRMACI V.  
Sürat Matbaacılık-Kırtasiye Tic. San.Ltd.Şti, Bartın, 2013

## Papers Presented at Peer-Reviewed Scientific Conferences

1. **Döküm Cüruf Atığının Jeopolimer Harç Üretiminde Kullanılabilirliğinin Araştırılması**

- APAYDIN F., ŞENOL A. F., Kandemir M.  
3rd International Conference on Design, Research and Development, İstanbul, Turkey, 13 December 2023,  
(Summary Text)
2. **YÜKSEK UZAMALI DÖKME DEMİRİN (GGG 400-18) UYGUN ÜRETİM ŞARTLARININ ARAŞTIRILMASI**  
APAYDIN F., AY Z.  
18. Uluslararası Bilimsel Araştırmalar Kongresi (UBAK) ANKARA/TÜRKİYE, 16 December 2023, (Full Text)
3. **Investigation of CASS test and Cycle Corrosion Test Results of Organic Coatings After Nano Coating Applied on 1xxx, 5xxx, 7xxx Aluminum Type Materials**  
Minaz C., APAYDIN F.  
2 nd International Congress of Engineering and Natural Sciences Studies (ICENSS2022, Ankara, Turkey, 07 May 2022, pp.70, (Summary Text)
4. **Comparison of Thermo-Mechanical and Thermo-Chemical Properties of Zircon/Mullite Added ASC Refractory**  
Çiçekdağı A. O. T., APAYDIN F.  
8th International Academic Studies Conference, Elazığ, Turkey, 15 March 2022, pp.170-171, (Summary Text)
5. **Nickel Recovery From Electrolytic Nickel-Chromium Plating Waste Sludge Effect of Mechanical Activation On Acquisition**  
Korkut A. İ., APAYDIN F.  
8th International Academic Studies Conference, Elazığ, Turkey, 15 March 2022, pp.119-120, (Summary Text)
6. **Alümina ve Zirkon Katılılı Silisyum Karbürün Sinterlenme Davranışlarının İncelenmesi**  
Üçok U., APAYDIN F., Karaağaç Z.  
6. Uluslararası Bilimsel Çalışmalar Kongresi, 26 July 2021, (Summary Text)
7. **Factors Affecting Lining Efficiency in Foundries Using Induction Furnace Melting**  
Karaca İ., APAYDIN F.  
The Fifth International Iron and Steel Symposium (IIS'21), 01 April 2021, pp.78-82, (Full Text)
8. **THE CORROSION BEHAVIOR OF MG-1CA-1Y-XSR (X: 0.5, 1, 1.5, AND 2 WT.) MAGNESİUM COMPOSITE FABRICATED BY MECHANICAL ALLOYING**  
ÖTEYAKA M. Ö., APAYDIN F., Apaydin Ş.  
5nd International Conference on Material Science and Technology in Cappadocia (IMSTEC'20), Nevşehir, Turkey, 16 - 18 October 2020, (Summary Text)
9. **FABRICATION OF MG-1CA-1Y-XSR (X=0.5, 1, 1.5, AND 2 WT.) COMPOSITE BY MECHANICAL ALLOYING FOR BIOMEDICAL APPLICATION**  
APAYDIN F., Apaydin Ş., ÖTEYAKA M. Ö.  
5nd International Conference on Material Science and Technology in Cappadocia (IMSTEC'20), Nevşehir, Turkey, 16 - 18 October 2020, (Summary Text)
10. **COMPARISON OF ELECTRICAL PROPERTIES OF RARE EARTH DOPED ZnO BASED VARISTOR BY CONVENTIONAL AND SPARK PLASMA SINTERING (SPS) METHOD**  
APAYDIN F., ÇELİK A., ÇELİK Y.  
The Internatinonal Conference on Materials Science, Mechanical and Automotive Engineerings and Technology in Cappadocia/TURKEY (IMSMATEC'19), Nevşehir, Turkey, 21 - 23 June 2019, vol.1296, (Summary Text)
11. **CuZn42, CuZn40Pb2 ve CuZn39Pb3 Alaşımlarının Mekanik Özelliklerine Isıl İşlemin Etkisi**  
APAYDIN F., AVCI Ş.  
2nd International Congress on Engineering and Architecture (ENAR-2019) Marmaris / Turkey, Marmaris, Turkey, 22 - 24 April 2019, pp.714-721, (Full Text)
12. **Comparison of electrical properties of ZnO-Bi2O3 based ceramics prepared by conventional and Spark Plasma Sintering (SPS) method**  
APAYDIN F., ÇELİK A., KARA F.  
IV. Uluslararası Seramik, Cam, Emaye, Sır ve Boya Kongresi (SERES'xx18), Eskişehir, Turkey, 10 - 12 October 2018, (Summary Text)
13. **Formation of Al-Ti-B phases for grain refinement of Al alloys produced by high energy ball milling**  
Arikoğlu M., APAYDIN F., ÖZER A.

- 10th International Conference on Materials Science and Engineering, BraMat 2017, Brasov, Romania, 8 - 11 March 2017, vol.907 MSF, pp.188-192, (Full Text)
14. **Formation of SrTiO<sub>3</sub> in mechanically activated SrCO<sub>3</sub> TiO<sub>2</sub> system**  
TUNÇ T., APAYDIN F., YILDIZ K.  
3rd Central and Eastern European Conference on Thermal Analysis and Calorimetry(CEEC TAC3), 25 - 28 August 2015, (Summary Text)
15. **Formation of barium titanate in mechanically activated barium carbonate andtitania system**  
APAYDIN F., TOPLAN H. Ö., YILDIZ K.  
12th Mediterranean Conference on Calorimetry and Thermal Analysis (MEDICTA2015), 17 - 19 June 2015, (Summary Text)
16. **Çinko oksidin mikroyapısal özelliklerine bakır oksit ve bizmut oksit katkısının etkisi**  
ÖZGÜRLÜK Y., APAYDIN F., YILMAZ M.  
3rd International Conference on Science Culture and Sport, Sarajevo, Bosnia And Herzegovina, 24 - 26 May 2014
17. **Refrakter Tuğlaların Kontrol Parametrelerinin Karşılaştırılması**  
APAYDIN F., Kaya K.  
3rd International Conference on Science Culture and Sport, Sarajevo, Bosnia And Herzegovina, 24 - 26 May 2014, pp.23, (Summary Text)
18. **INVESTIGATION OF CARBOOTHERMAL REDUCTION OF MECHANICALLY ACTIVATED CHROMITE WITH THERMAL ANALYSIS**  
APAYDIN F., YILDIZ K.  
METAL 2014: 23RD INTERNATIONAL CONFERENCE ON METALLURGY AND MATERIALS, Brno, Czech Republic, 21 - 23 May 2014, pp.1411-1415, (Full Text)
19. **Thermal behaviour of mechanically activated alunite**  
TUNÇ PARLAK T., APAYDIN F., YILDIZ K.  
2nd Central and Eastern European Conference on Thermal Analysis and Calorimetry (CEEC-TAC2), Vilnius, Lithuania, 27 - 30 August 2013, (Full Text)
20. **The effects of mechanical activation on structure and thermal decomposition of ulexite**  
TUNÇ PARLAK T., APAYDIN F., TOPLAN H. Ö., YILDIZ K.  
2nd Central and Eastern European Conference on Thermal Analysis and Calorimetry (CEEC-TAC2), Vilnius, Lithuania, 27 - 30 August 2013, (Full Text)
21. **Enhanced Dissolution of Manganese Carbonate Ore in Acidic Media**  
YILMAZ V. M., APAYDIN F.  
16. Uluslararası Metalurji ve Malzeme Kongresi, İstanbul, Turkey, 13 - 15 September 2012, (Full Text)
22. **Effect of mechanical activation on the structure of nickeliferous laterite**  
TUNÇ PARLAK T., APAYDIN F., YILDIZ K.  
2. International Advances in Applied Materials Science Congress, Antalya, Turkey, 24 - 28 April 2012, (Full Text)
23. **Mikroalaşaklı Vanadyum ve Niobyum Karbür İçeren Düşük Karbonlu Çeliklerin Termomekanik İşlem Sonrası İğnesel Ferrit Oluşumunun İncelenmesi**  
Hangardاش A., KURT B., APAYDIN F., SÜTCÜ M., Karagöz M.  
International Iron Stell Symposium (IISS'xx12), Karabük, Turkey, 2 - 04 April 2012, pp.551-557, (Full Text)
24. **Mekanik aktivasyonun kromit yapısına etkileri**  
YARKADAŞ G., APAYDIN F., YILDIZ K.  
18. Ulusal Elektron Mikroskopı Kongresi, Eskişehir, Turkey, 26 - 28 August 2007, (Summary Text)
25. **Alunitin termal dekompozisyonuna mekanik aktivasyon süresinin etkisi**  
APAYDIN F., TOPLAN H. Ö., YILDIZ K.  
6.Uluslararası Katılımlı Ulusal Seramik Kongresi, Sakarya, Turkey, 30 October - 01 November 2006, (Full Text)
26. **ZnO Sb<sub>2</sub>O<sub>3</sub> sisteminde mekanokimyasal sentezle spinel oluşumu**  
APAYDIN F., TOPLAN N., TOPLAN H. Ö., YILDIZ K.  
6.Uluslararası Katılımlı Ulusal Seramik Kongresi, Sakarya, Turkey, 30 October - 01 November 2006, (Full Text)
27. **ZnO in Mikroyapısal Özelliklerine Mekanik Aktivasyonun Etkisi**  
APAYDIN F., TOPLAN N., TOPLAN H. Ö., YILDIZ K.

11. Uluslararası Denizli Malzeme Sempozyumu, Denizli, Turkey, 19 - 21 April 2006, (Full Text)
28. **Farklı Metal Oksitlerin CuO SiO<sub>2</sub> ZrO<sub>2</sub> ZnO in Mikro Mikro yapısına Etkisi**  
CANİKOĞLU N., APAYDIN F., TOPLAN N., YILDIZ K., TOPLAN H. Ö.  
4.Uluslararası Toz Metalurjisi Konferansı, Sakarya, Turkey, 18 - 22 May 2005, pp.563-573, (Full Text)

## Academic and Administrative Experience

2016 - 2018	<b>Assistant Director of the Institute</b>	Bilecik Seyh Edebali University
2016 - 2018	<b>Rector's Advisor</b>	Bilecik Seyh Edebali University
2016 - 2016	<b>Secretary General</b>	Bilecik Seyh Edebali University
2014 - 2015	<b>Head of Department</b>	Bartin University
2012 - 2014	<b>Head of Department</b>	Bartin University
2012 - 2014	<b>Head of Department</b>	Bartin University
2012 - 2013	<b>BAP Coordinator</b>	Bartin University
2010 - 2012	<b>Farabi Program Institutional Coordinator</b>	Bartin University
2010 - 2012	<b>Vice Dean</b>	Bartin University
2009 - 2010	<b>Assistant Director of Vocational School</b>	Kütahya Dumlupınar University
2008 - 2010	<b>Head of Department</b>	Kütahya Dumlupınar University

## Courses

### Doctorate

Bilim Etiği, Doctorate, 2016 - 2017

### Postgraduate

İleri Kimyasal Metalurji, Postgraduate, 2019 - 2020

METALURJİK PROSESLERDE MEKANİK AKTİVASYON VE MEKANİK ALAŞIMLAMA, Postgraduate, 2019 - 2020, 2018 - 2019

Metalurjik Proseslerin Kinetiği, Postgraduate, 2018 - 2019

Bilim Etiği, Postgraduate, 2017 - 2018, 2016 - 2017

İLERİ METALURJİ TERMODİNAMİĞİ, Postgraduate, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011

### Undergraduate

METALLERİN ISİL İŞLEMİ, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018

METALURJİ VE MALZEME MÜHENDİSLİĞİ UYGULAMALARI-I, Undergraduate, 2019 - 2020, 2018 - 2019

METALURJİ VE MALZEME MÜHENDİSLİĞİNE GİRİŞ, Undergraduate, 2019 - 2020, 2018 - 2019, 2012 - 2013

KİMYASAL METALURJİ, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2013 - 2014, 2012 - 2013

MALZEME LABORATUVARI-I, Undergraduate, 2019 - 2020, 2018 - 2019

Metalurji ve Malzeme Mühendisliği Uygulamaları-II, Undergraduate, 2018 - 2019

Fiziksel Metalurji, Undergraduate, 2018 - 2019

DEMİR ÇELİK ÜRETİMİ, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017  
Demir Dışı Metaller, Undergraduate, 2018 - 2019, 2017 - 2018  
TOPLAM KALİTE YÖNETİMİ, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016  
Malzeme Termodinamigi-II, Undergraduate, 2017 - 2018  
Malzeme Termodinamigi-I, Undergraduate, 2017 - 2018  
Malzeme Termodinamigi-2, Undergraduate, 2016 - 2017  
METALURJİ TERMODİNAMİĞİ, Undergraduate, 2016 - 2017, 2014 - 2015  
Isıl İşlem, Undergraduate, 2015 - 2016  
Yönetim ve Organizasyon, Undergraduate, 2015 - 2016  
FİZİKOKİMYA, Undergraduate, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012  
KOROZYON, Undergraduate, 2013 - 2014, 2012 - 2013  
MALZEME SEÇİMİ VE TASARIMI, Undergraduate, 2012 - 2013  
TAHRİBATSIZ TESTLER, Undergraduate, 2012 - 2013

**Associate Degree**

isıl işlem, Associate Degree, 2015 - 2016

### Supervised Theses

Apaydin F., Elektrolitik nikel kaplama atık çamurundan nikel geri kazanımına mekanik aktivasyonun etkisinin araştırılması, Postgraduate, A.İREM(Student), 2022

Apaydin F., Küresel grafitli dökme demirlerin üretiminde metalurjik silisyum karbür ve ferro silis katkılarının malzeme üzerindeki etkilerinin araştırılması, Postgraduate, İ.KARACA(Student), 2022

Apaydin F., Zirkon/mullit ilavesi ile ASC refrakterlerin termo-mekanik ve termo kimyasal özelliklerinin iyileştirilmesi, Postgraduate, A.OSMAN(Student), 2022

Apaydin F., Al<sub>2</sub>O<sub>3</sub> ve ZrO<sub>2</sub> katkılı silisyum karbürün sinterlenme davranışlarının incelenmesi ve karakterizasyonu, Postgraduate, U.ÜÇOK(Student), 2022

Apaydin F., 1050, 5005, 7075 alüminyum tipi malzemelerin üzerine uygulanan nano yüzey işlem sonrasında yapılan organik kaplamaların korozyon davranışının incelenmesi, Postgraduate, C.MİNAZ(Student), 2022

FATİH A., Asidik ortamda malahitten bakır kazanım parametrelerinin geliştirilmesi, Postgraduate, M.AKÇAY(Student), 2015

FATİH A., Çimento döner firmlarında kullanılan bazik refrakter tuğlaların kontrol parametrelerinin karşılaştırılması, Postgraduate, K.KAYA(Student), 2014

FATİH A., Denizli-Tavas karbonatlı mangan cevherinden asidik ortamda mangan çözünürlüğünne mekanik aktivasyonun etkisi, Postgraduate, V.MURAT(Student), 2013

### Research Areas

Ceramic Materials, Material Characterization, Production Metallurgy, Non-Ferrous Alloy Production, Iron and Steel Production, Recycling Processes, Hydrometallurgy, Pyrometallurgy, Powder Metallurgy