

## Prof. Dr. İSHAK KARAKAYA

### Kişisel Bilgiler

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### Eğitim Bilgileri

Doktora, McGill University, Metalurji Mühendisliği, Kanada 1981 - 1985

Yüksek Lisans, McGill University, Metalurji Mühendisliği, Kanada 1979 - 1981

Lisans, Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Metalurji ve Malzeme Mühendisliği Bölümü, Türkiye 1973 - 1978

### Yabancı Diller

İngilizce, C1 İleri

### Araştırma Alanları

Teknik Bilimler, Metalurji ve Malzeme Mühendisliği, Üretim Metalurjisi, Demir Dışı Metal Üretimi, Elektrolitik Kaplama, Elektrometalurji

### Akademik Unvanlar / Görevler

Prof. Dr., Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Metalurji ve Malzeme Mühendisliği Bölümü, 1994 - Devam Ediyor

Doç. Dr., Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Metalurji ve Malzeme Mühendisliği Bölümü, 1988 - 1994

Yrd. Doç. Dr., Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Metalurji ve Malzeme Mühendisliği Bölümü, 1987 - 1988

### Akademik İdari Deneyim

Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Metalurji ve Malzeme Mühendisliği Bölümü, 2003 - 2006

## Verdiği Dersler

Materials Processing, Lisans, 2018 - 2019

## Yönetilen Tezler

- KARAKAYA İ., Effects of copper electroplating parameters on microstructure and mechanical properties of Al-Cu brazed joints, Yüksek Lisans, A.ÖZDEMİR(Öğrenci), 2022
- KARAKAYA İ., Synthesizing cation doped stable alpha nickel hydroxide having low self discharge rate by chemical precipitation, Yüksek Lisans, T.İLHAN(Öğrenci), 2022
- KARAKAYA İ., Electroless deposition of oxidation resistant high temperature coatings in molten salt, Yüksek Lisans, İ.EMRE(Öğrenci), 2021
- KARAKAYA İ., FORMATION OF Au-Ag-Cu TERNARY ALLOYS BY ELECTROCHEMICAL DEPOSITION, Yüksek Lisans, B.ÇAĞAN(Öğrenci), 2021
- KARAKAYA İ., Değerli parçacık gömülü kompozit atıkların entegre geri dönüşümü., Yüksek Lisans, T.Göynük(Öğrenci), 2019
- KARAKAYA İ., Molibden refrakter metal tozlarının elektrokimyasal üretimi., Yüksek Lisans, B.Akpınar(Öğrenci), 2019
- KARAKAYA İ., Değerli Parçacık Gömülü Kompozit Atıkların Entegre Geri Dönüşümü, Yüksek Lisans, T.GÖYNÜK(Öğrenci), 2019
- KARAKAYA İ., Yüksek yoğunluklu poliüretan yüzeylerin metalizasyonu., Yüksek Lisans, B.Aykaç(Öğrenci), 2019
- KARAKAYA İ., Erimiş tuz içerisinde elektrokimyasal yöntemle al-sc alaşımı oluşturulması., Yüksek Lisans, Ç.Polat(Öğrenci), 2019
- KARAKAYA İ., Bakır üzerine kaplanan gümüşün yüzey özelliklerine darbe parametrelerinin etkisi., Yüksek Lisans, C.Başaran(Öğrenci), 2019
- KARAKAYA İ., Formation and characterization of electroformed cylindrical accordion geometry, Yüksek Lisans, B.ÇETİNÖZ(Öğrenci), 2018
- KARAKAYA İ., Electroformation and characterization of Al<sub>2</sub>O<sub>3</sub> embedded nickel matrix composite coatings, Yüksek Lisans, O.YILMAZ(Öğrenci), 2018
- KARAKAYA İ., Cathodic protection of aluminum components of armoured amphibious vehicles in marine environment, Yüksek Lisans, R.ONUR(Öğrenci), 2017
- KARAKAYA İ., Electrochemical production of tungsten refractory metal powders, Yüksek Lisans, F.ÖZDEMİR(Öğrenci), 2017
- KARAKAYA İ., Cathodic Protection of Steel Components of Armoured Amphibious Vehicles in Marine Environment, Yüksek Lisans, R.AKSU(Öğrenci), 2017
- KARAKAYA İ., Computer simulation of processes involving multicomponent multiphase equilibria, Yüksek Lisans, M.SERDAL(Öğrenci), 2016
- KARAKAYA İ., EFFECTS OF ANODIZING PARAMETERS ON THE FORMATION OF TITANIUM DIOXIDE NANOTUBE ARRAYS ON Ti6Al4V ALLOY, Yüksek Lisans, Z.AYÇA(Öğrenci), 2015
- KARAKAYA İ., Ti6Al4V alaşımı üzerinde anodik oksitleme yöntemi ile oluşturulan titanyum oksit nanotüplerini etkileyen oksitleme değişkenleri, Yüksek Lisans, Z.Ayça(Öğrenci), 2015
- KARAKAYA İ., Formation of Indium Solder Material by Electrochemical Methods, Yüksek Lisans, O.ORKUT(Öğrenci), 2014
- KARAKAYA İ., Electrochemical formation of brazing alloys on metal substrates, Yüksek Lisans, F.JULU(Öğrenci), 2014
- KARAKAYA İ., KALKANLI A., Liquid phase sintering of tungsten-nickel-cobalt heavy alloys, Yüksek Lisans, O.DİNÇER(Öğrenci), 2014
- KARAKAYA İ., ELECTROCHEMICAL FORMATION OF COLD SHIELD FOR OPTOELECTRONIC DEVICES, Yüksek Lisans, B.ARSLAN(Öğrenci), 2014
- KARAKAYA İ., Recovery of tungsten from tungsten bearing compounds, Doktora, M.ERDOĞAN(Öğrenci), 2013
- KARAKAYA İ., In-situ Formation of Mg-Ni Intermetallics, Yüksek Lisans, F.ERDEN(Öğrenci), 2013
- KARAKAYA İ., Effect of chromium on the oxidation of steels used in the construction of petroleum refinery heaters, Doktora, A.SULTAN(Öğrenci), 2013

- KARAKAYA İ., Electrocodeposition of molybdenum disulfide particles in nickel matrix, Doktora, E.SARALOĞLU(Öğrenci), 2013
- KARAKAYA İ., Production of Tungsten by Pulsed Potential Electroreduction, Yüksek Lisans, O.GÖKÇE(Öğrenci), 2011
- KARAKAYA İ., Reduction of silicon dioxide by electrochemical deoxidation, Yüksek Lisans, E.ERGÜL(Öğrenci), 2010
- KARAKAYA İ., ÖZTÜRK T., Ferroboration production by electrodeoxidation, Yüksek Lisans, T.ÖRS(Öğrenci), 2008
- KARAKAYA İ., Tungsten production by electrodeoxidation, Yüksek Lisans, M.ERDOĞAN(Öğrenci), 2007
- KARAKAYA İ., Electrolytic magnesium production using coaxial electrodes, Doktora, G.DEMİRCİ(Öğrenci), 2006
- KARAKAYA İ., High temperature corrosion of steels used in petroleum refinery heaters, Yüksek Lisans, A.SULTAN(Öğrenci), 2005
- KARAKAYA İ., Hydrometallurgical treatment of Beylikahır rare earth preconcentrate, Doktora, M.KUL(Öğrenci), 2003
- KARAKAYA İ., Yiterbiyum-baryum-bakır oksit süperiletken şeritlerin sol-jel metodu ile üretimi ve karakterizasyonu, Doktora, H.OKUYUCU(Öğrenci), 2002
- KARAKAYA İ., Development of a computer program for multi-element predominance area diagrams, Yüksek Lisans, E.KONCA(Öğrenci), 2000
- KARAKAYA İ., Development of a computer program for thermodynamic calculation of binary phase diagrams, Yüksek Lisans, İ.NUMANOĞLU(Öğrenci), 1999
- KARAKAYA İ., Purification of magnesium-lead alloy by molten salt electrolysis, Yüksek Lisans, K.ÇITAK(Öğrenci), 1998
- KARAKAYA İ., Molten salt electrolysis of magnesium and its hydrodynamics, Yüksek Lisans, G.DEMİRCİ(Öğrenci), 1998
- KARAKAYA İ., High temperature corrosion of boiler plant flues, Yüksek Lisans, İ.ATİK(Öğrenci), 1998
- KARAKAYA İ., Kalay-bizmut sisteminin termodinamiği, Yüksek Lisans, H.OKUYUCU(Öğrenci), 1997
- TOPKAYA Y. A., KARAKAYA İ., Recovery of lead and cadmium from cinkur waelz oxide by using chloridizing volatilization method., Doktora, M.Can(Öğrenci), 1996
- KARAKAYA İ., An interactive computer program for predominance area diagrams, Yüksek Lisans, M.MURAT(Öğrenci), 1994
- KARAKAYA İ., Electrolysis of MgCl<sub>2</sub> with a top inserted anode and aMg-Pb cathode, Yüksek Lisans, M.GÜDEN(Öğrenci), 1992
- KARAKAYA İ., Development of an interactive computer program for ternary phase diagrams (Using thermodynamic data), Yüksek Lisans, S.KEMAL(Öğrenci), 1992
- KARAKAYA İ., Recovery of germanium and other metals from the leach residue of Çinkur, Yüksek Lisans, M.Can(Öğrenci), 1991

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

- I. **Investigation of Reduction Mechanism and the Effect of NaCl-CaCl<sub>2</sub> Mixture on Tungsten Production from Tungsten Sulfide**  
YILMAZ O., ERDOĞAN M., KARAKAYA İ.  
Journal of the Electrochemical Society, cilt.170, sa.6, 2023 (SCI-Expanded)
- II. **Examination of the metallization behaviour of an ABS surface**  
Ünlü B., Öz Y., ERDOĞAN M., KARAKAYA İ.  
Surface Engineering, cilt.39, sa.7-12, ss.807-815, 2023 (SCI-Expanded)
- III. **A Novel and Eco-friendly Approach for the Simultaneous Recovery of Copper and Diamond from Waste Cutting Segments via Electrodissolution/Deposition**  
Kul M., Erden F., OSKAY K. O., Karasungur O., ŞİMŞİR M., Kumruoglu L. C., KARAKAYA İ.  
JOURNAL OF SUSTAINABLE METALLURGY, cilt.7, sa.3, ss.1224-1240, 2021 (SCI-Expanded)
- IV. **Effects and characterisations of pulse electrodeposition parameters of silver in terms of scattering parameter and surface roughness for waveguides operating at high frequencies**  
Başaran C., KARAKAYA İ.  
International Journal of Surface Science and Engineering, cilt.15, sa.2, ss.118-130, 2021 (SCI-Expanded)
- V. **Metallisation of high density polyurethane surfaces**  
Unlu B., Oz Y., ERDOĞAN M., KARAKAYA İ.

INTERNATIONAL JOURNAL OF SURFACE SCIENCE AND ENGINEERING, cilt.15, sa.3, ss.242-264, 2021 (SCI-Expanded)

- VI. **Combined effects of ALS and SLS on Al<sub>2</sub>O<sub>3</sub> reinforced composite nickel coatings**  
Yilmaz O., Erdogan M., Karakaya I.  
SURFACE ENGINEERING, cilt.36, sa.5, ss.477-484, 2020 (SCI-Expanded)
- VII. **Effects of fabrication method on initial powder characteristics and liquid phase sintering behaviour of tungsten**  
Erol M., Erdogan M., Karakaya İ.  
INTERNATIONAL JOURNAL OF REFRACTORY METALS & HARD MATERIALS, cilt.77, ss.82-89, 2018 (SCI-Expanded)
- VIII. **Removal of Trace Amounts of Copper from Concentrated Hydrochloric Acid Solutions**  
Erdogan M., Karakaya E., Aras M. S., Karagul S. C., Ersoy M. K., Öztürk A., Karakaya İ.  
INTERNATIONAL JOURNAL OF ELECTROCHEMICAL SCIENCE, cilt.13, ss.10934-10947, 2018 (SCI-Expanded)
- IX. **Formation and characterization of infrared absorbing copper oxide surfaces**  
Arslan B., Demirci G., Erdogan M., Karakaya İ.  
APPLIED SURFACE SCIENCE, cilt.402, ss.218-224, 2017 (SCI-Expanded)
- X. **Investigation of the tribological behaviour of electrocodeposited Ni-MoS<sub>2</sub> composite coatings**  
Güler E. S., Konca E., KARAKAYA İ.  
International Journal of Surface Science and Engineering, cilt.11, sa.5, ss.418-432, 2017 (SCI-Expanded)
- XI. **Processing and microstructural characterization of liquid phase sintered tungsten-nickel-cobalt heavy alloys**  
DINCER O., PEHLIVANOGLU M. K., CALISKAN N. K., KARAKAYA İ., KALKANLI A.  
INTERNATIONAL JOURNAL OF REFRACTORY METALS & HARD MATERIALS, cilt.50, ss.106-112, 2015 (SCI-Expanded)
- XII. **On the Preparation of Mg<sub>2</sub>Ni by Combining Electrodeoxidation and Electrolysis Techniques**  
ERDEN F., KARAKAYA İ., Erdogan M.  
INTERNATIONAL JOURNAL OF ELECTROCHEMICAL SCIENCE, cilt.9, sa.11, ss.6627-6639, 2014 (SCI-Expanded)
- XIII. **Effects of current density, coating thickness, temperature, pH and particle concentration on internal stress during Ni-MoS<sub>2</sub> electrocodeposition**  
Guler E. S., KARAKAYA İ., KONCA E.  
SURFACE ENGINEERING, cilt.30, sa.2, ss.109-114, 2014 (SCI-Expanded)
- XIV. **Effect of Electrodeposition Parameters on the Current Density of Hydrogen Evolution Reaction in Ni and Ni-MoS<sub>2</sub> Composite Coatings**  
Gueler E. S., KONCA E., KARAKAYA İ.  
INTERNATIONAL JOURNAL OF ELECTROCHEMICAL SCIENCE, cilt.8, sa.4, ss.5496-5505, 2013 (SCI-Expanded)
- XV. **On the Electrochemical Reduction Mechanism of CaWO<sub>4</sub> to W Powder**  
Erdogan M., KARAKAYA İ.  
METALLURGICAL AND MATERIALS TRANSACTIONS B-PROCESS METALLURGY AND MATERIALS PROCESSING SCIENCE, cilt.43, sa.4, ss.667-670, 2012 (SCI-Expanded)
- XVI. **Influence of water vapour on high temperature oxidation of steels used in petroleum refinery heaters**  
Sultan A., KARAKAYA İ., Erdogan M.  
MATERIALS AND CORROSION-WERKSTOFFE UND KORROSION, cilt.63, sa.2, ss.119-126, 2012 (SCI-Expanded)
- XVII. **Electrochemical decomposition of SiO<sub>2</sub> pellets to form silicon in molten salts**  
Ergul E., KARAKAYA İ., Erdogan M.  
JOURNAL OF ALLOYS AND COMPOUNDS, cilt.509, sa.3, ss.899-903, 2011 (SCI-Expanded)
- XVIII. **Direct synthesis of Mg-Ni compounds from their oxides**  
Tan S., Aydinol K., ÖZTÜRK T., KARAKAYA İ.  
JOURNAL OF ALLOYS AND COMPOUNDS, cilt.504, sa.1, ss.134-140, 2010 (SCI-Expanded)
- XIX. **Electrochemical Reduction of Tungsten Compounds to Produce Tungsten Powder**  
ERDOĞAN M., KARAKAYA İ.  
METALLURGICAL AND MATERIALS TRANSACTIONS B-PROCESS METALLURGY AND MATERIALS PROCESSING

- SCIENCE, cilt.41, sa.4, ss.798-804, 2010 (SCI-Expanded)
- XX. **Synthesis of Fe-4.6 wt% B alloy via electro-deoxidation of mixed oxides**  
Ors T., Tan S., ÖZTÜRK T., KARAKAYA İ.  
JOURNAL OF MATERIALS SCIENCE, cilt.44, sa.13, ss.3514-3519, 2009 (SCI-Expanded)
- XXI. **Synthesis of FeTi from mixed oxide precursors**  
Tan S., Oers T., AYDINOL M. K., ÖZTÜRK T., KARAKAYA İ.  
JOURNAL OF ALLOYS AND COMPOUNDS, cilt.475, ss.368-372, 2009 (SCI-Expanded)
- XXII. **Electrolytic magnesium production and its hydrodynamics by using an Mg-Pb alloy cathode**  
Demirci G., KARAKAYA İ.  
JOURNAL OF ALLOYS AND COMPOUNDS, cilt.465, ss.255-260, 2008 (SCI-Expanded)
- XXIII. **Rare earth double sulfates from pre-concentrated bastnasite**  
Kul M., TOPKAYA Y. A., KARAKAYA İ.  
HYDROMETALLURGY, cilt.93, ss.129-135, 2008 (SCI-Expanded)
- XXIV. **Collection of magnesium in an Mg-Pb alloy cathode placed at the bottom of the cell in MgCl<sub>2</sub> electrolysis**  
Demirci G., Karakaya I.  
JOURNAL OF ALLOYS AND COMPOUNDS, cilt.439, ss.237-242, 2007 (SCI-Expanded)
- XXV. **ELECTROLYSIS OF MGCL<sub>2</sub> WITH A TOP INSERTED ANODE AND AN MG PB CATHODE**  
GUDEN M., KARAKAYA İ.  
JOURNAL OF APPLIED ELECTROCHEMISTRY, cilt.24, sa.8, ss.791-797, 1994 (SCI-Expanded)
- XXVI. **The Ag B Silver Boron System**  
KARAKAYA İ.  
Bulletin of Alloy Phase Diagrams, cilt.11, ss.547, 1990 (SCI-Expanded)
- XXVII. **The Ag N Silver Nitrogen System**  
KARAKAYA İ.  
Bulletin of Alloy Phase Diagrams, cilt.11, ss.486-487, 1990 (SCI-Expanded)
- XXVIII. **The Ag Mn Silver Manganese System**  
KARAKAYA İ.  
Bulletin of Alloy Phase Diagrams, cilt.11, ss.480-486, 1990 (SCI-Expanded)
- XXIX. **The Ag Se Silver Selenium System**  
KARAKAYA İ., Thompson W. T.  
Bulletin of Alloy Phase Diagrams, cilt.11, ss.266-271, 1990 (SCI-Expanded)
- XXX. **ADVICE SYSTEM ON HIGH-TEMPERATURE ALLOY CORROSION**  
JOHN R., THOMPSON W., KARAKAYA I.  
MATERIALS PERFORMANCE, cilt.28, sa.1, ss.69-73, 1989 (SCI-Expanded)
- XXXI. **The Ag P Silver Phosphorus System**  
KARAKAYA İ.  
Bulletin of Alloy Phase Diagrams, cilt.9, ss.232-236, 1988 (SCI-Expanded)
- XXXII. **PARTIAL MOLAR PROPERTIES OF MGCL<sub>2</sub> IN MGCL<sub>2</sub>-KCL-CACL<sub>2</sub> MELTS**  
ZHU J., KARAKAYA I., THOMPSON W.  
JOURNAL OF THE ELECTROCHEMICAL SOCIETY, cilt.135, sa.1, ss.122-126, 1988 (SCI-Expanded)
- XXXIII. **The Ag Re Silver Rhenium System**  
KARAKAYA İ.  
Bulletin of Alloy Phase Diagrams, cilt.9, ss.243-244, 1988 (SCI-Expanded)
- XXXIV. **The Ag Pb Silver Lead System**  
KARAKAYA İ.  
Bulletin of Alloy Phase Diagrams, cilt.8, ss.326-334, 1987 (SCI-Expanded)
- XXXV. **A THERMODYNAMIC STUDY OF THE SYSTEM MGCL<sub>2</sub>-NACL-CACL<sub>2</sub>**  
KARAKAYA İ., THOMPSON W.  
CANADIAN METALLURGICAL QUARTERLY, cilt.25, sa.4, ss.307-317, 1986 (SCI-Expanded)
- XXXVI. **THERMODYNAMIC PROPERTIES OF MGCL<sub>2</sub>-NACL MELTS FROM EMF-MEASUREMENTS**

- KARAKAYA İ., thompson w.  
JOURNAL OF THE ELECTROCHEMICAL SOCIETY, cilt.133, sa.4, ss.702-706, 1986 (SCI-Expanded)
- XXXVII. **The Ag Ir Silver Iridium System**  
KARAKAYA İ.  
Bulletin of Alloy Phase Diagrams, cilt.7, ss.359-360, 1986 (SCI-Expanded)
- XXXVIII. **The Ag Os Silver Osmium System**  
KARAKAYA İ., thompson w.  
Bulletin of Alloy Phase Diagrams, cilt.7, ss.360-362, 1986 (SCI-Expanded)
- XXXIX. **Thermodynamic properties of 1 x MgCl<sub>2</sub> xCaCl<sub>2</sub> melts**  
KARAKAYA İ., thompson w.  
J. Chemical Thermodynamics, cilt.18, ss.859-866, 1986 (SCI-Expanded)
- XL. **Introduction of boundary conditions in the Pelton Flengas Gibbs Duhem Integration for ternary solutions**  
KARAKAYA İ., thompson w.  
Canadian Journal of Chemistry, cilt.63, ss.2808-2809, 1985 (SCI-Expanded)
- XLI. **Correction**  
KARAKAYA İ., thompson w.  
Can. J. Chem., cilt.63, ss.3634, 1985 (SCI-Expanded)
- XLII. **Thermodynamic properties of SnO in SnO TiO<sub>2</sub> melts**  
KARAKAYA İ., William T T.  
Canadian Metallurgical Quarterly, cilt.22, ss.61-65, 1983 (SCI-Expanded)

## Diğer Dergilerde Yayınlanan Makaleler

- I. **Investigation of Au-Ag-Cu Alloy Electrodeposition to Electromechanical Systems**  
Çağan B., Erdoğan M., Yılmaz C., Yurdakul B., Karakaya I.  
ECS Transactions, cilt.97, sa.7, ss.485-490, 2020 (Scopus)
- II. **Effects of Pulse Electroplating Parameters on Return Loss (S11) and Surface Roughness of Silver Coatings**  
Başaran C., KARAKAYA İ.  
ECSArxiv, 2019 (Hakemli Dergi)
- III. **ERİMİŞ TUZ İÇİNDE ELEKTROKİMYASAL İNDİRGEME YÖNTEMİYLE SİLİSYUM ÜRETİMİ**  
ERDOĞAN M., Ergül E., KARAKAYA İ.  
Selçuk Üniversitesi Mühendislik Bilim ve Teknoloji Dergisi, 2017 (Hakemli Dergi)
- IV. **Katı Molibden Bileşiklerinin Elektrokimyasal İndirgenmesiyle Molibden Üretimi**  
ERDOĞAN M., Akpınar B., KARAKAYA İ.  
Çukurova Üniversitesi Mühendislik Mimarlık Fakültesi Dergisi, 2017 (Hakemli Dergi)
- V. **Friction Reducing Composite Plating in Rocket Launchers. International Journal of Engineering Research Development**  
SARALOĞLU GÜLER E., KARAKAYA İ.  
International Journal of Engineering Research Development, 2017 (Hakemli Dergi)
- VI. **Oxidation of Low Chromium Steels in Dry and Moist Atmospheres**  
ERDOĞAN M., SULTAN a., KARAKAYA İ.  
OXIDATION COMMUNICATIONS, cilt.40, ss.51-60, 2017 (Scopus)
- VII. **Taguchi Design of Internal Stress and Friction Measurements during Electrodeposition**  
SARALOĞLU GÜLER E., KARAKAYA İ.  
Journal of Material Science Engineering, cilt.6, 2017 (Hakemli Dergi)
- VIII. **The Role of Electrolyte Composition on Codeposited Ag and Cu**  
ulu f., Demici G., ERDOĞAN M., KARAKAYA İ.  
ECS Transactions, cilt.72, ss.35-44, 2016 (Scopus)

- IX. A Pulse Voltage Application in Electrochemical Reduction of Solid CaWO<sub>4</sub> Powder**  
Goksu O. G., ERDOĞAN M., KARAKAYA İ.  
ECS Transactions, cilt.72, ss.31-39, 2016 (Scopus)
- X. Formation of gold plated electroformed copper structures**  
ARSLAN B., Demirci G., KARAKAYA İ., ERDOĞAN M.  
Advances in Materials and Processing Technologies, cilt.1, ss.384-393, 2016 (Scopus)
- XI. Formation of Titanium Dioxide Nanotube Arrays by Anodizing Ti6Al4V Alloy**  
KARAKAYA İ., ERDOĞAN M.  
ECS Transactions, cilt.58, ss.45-52, 2014 (Scopus)
- XII. The Ag C Silver Carbon System**  
KARAKAYA İ., William T T.  
Bulletin of Alloy Phase Diagrams, cilt.9, ss.226-227, 1988 (Hakemli Dergi)
- XIII. The Pb Sn Lead Tin System**  
KARAKAYA İ., William T T.  
Bulletin of Alloy Phase Diagrams, cilt.9, ss.144-152, 1988 (Hakemli Dergi)
- XIV. A Database for the Selection of Materials for High Temperature Service**  
KARAKAYA İ., Randy C J., William T T.  
Materials & Components in Fossil Energy Applications, US Department of Energy Newsletter, ss.1-3, 1988 (Hakemli Dergi)
- XV. The Ag Pd Silver Palladium System**  
KARAKAYA İ., William T T.  
Bulletin of Alloy Phase Diagrams, cilt.9, ss.237-243, 1988 (Hakemli Dergi)
- XVI. The Ag Sn Silver Tin System**  
Karakaya İ., William T T.  
Bulletin of Alloy Phase Diagrams, cilt.8, ss.340-347, 1987 (Hakemli Dergi)
- XVII. The Ag Pt Silver Platinum System**  
KARAKAYA İ., William T T.  
Bulletin of Alloy Phase Diagrams, cilt.8, ss.334-340, 1987 (Hakemli Dergi)
- XVIII. The Ag Co Silver Cobalt System**  
KARAKAYA İ., William T T.  
Bulletin of Alloy Phase Diagrams, cilt.7, ss.259-263, 1986 (Hakemli Dergi)
- XIX. The Ag Ru Silver Ruthenium System**  
KARAKAYA İ., William T T.  
Bulletin of Alloy Phase Diagrams, cilt.7, ss.365-368, 1986 (Hakemli Dergi)
- XX. The Ag Rh Silver Rhodium System**  
KARAKAYA İ., William T T.  
Bulletin of Alloy Phase Diagrams, cilt.7, ss.362-365, 1986 (Hakemli Dergi)

### **Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar**

- I. Modeling and Experimental Validation of Critical Distance and the Maximum Depth of Galvanic Corrosion-Induced Pitting on the 2024-T3 with CFRP Joint**  
Yıldırım M. A., Erdoğan M., Karakaya I.  
237th ECS Meeting, Montreal, Kanada, 10 Mayıs 2020
- II. Formation of Mo Metal Powder By Electrochemical Reduction of CaMoO<sub>4</sub> and MoS<sub>2</sub> Compounds**  
akpınar b., ERDOĞAN M., KARAKAYA İ.  
237th ECS Meeting, Montreal, Kanada, 10 Mayıs 2020
- III. Metallization of High Density Polyurethane Surfaces**  
Aykaç B., KARAKAYA İ., ERDOĞAN M., Öz Y.  
237th ECS Meeting, Montreal, Kanada, 10 Mayıs 2020, cilt.97, ss.1

- IV. **Effects and Characterizations of Pulse Electrodeposition Parameters of Silver on Surface Roughness and Scattering Parameters of Horn Antennas**  
Başaran C., KARAKAYA İ.  
235th ECS Meeting, 26 - 29 Mayıs 2019
- V. **Effect of Heat Treatment on the Microstructure and Surface Properties of Ni-Based Platings**  
Başkan M., Erdoğan M., Karakaya İ.  
19th International Metallurgy and Materials Congress (IMMC 2018), İstanbul, Türkiye, 25 - 27 Ekim 2018, ss.1008-1011
- VI. **Electrochemical Formation of Alloys of Aluminum in Molten Salts**  
Polat Ç., Erdoğan M., Karakaya İ.  
19th International Metallurgy and Materials Congress (IMMC 2018), İstanbul, Türkiye, 25 - 27 Ekim 2018, ss.132-135
- VII. **Electrochemical Deposition of Au-Ag-Cu Alloys on CuBe<sub>2</sub>**  
Çetinöz B., Erdoğan M., Karakaya İ., Yurdakul E. B.  
19th International Metallurgy and Materials Congress, ISTANBUL (IMMC 2018), İstanbul, Türkiye, 25 - 27 Ekim 2018, ss.1052-1056
- VIII. **Electrochemical etching of an Fe-Ni-Co alloy**  
Aksu Y., Demirci G., Erdoğan M., Karakaya İ.  
5th International Conference on Welding Technologies and Exhibition (ICWET'18), Sarajevo, Bosna-Hersek, 26 - 28 Eylül 2018, ss.56
- IX. **Electrochemical etching of an Fe-Ni-Co alloy**  
Aksu Y., Demirci G., Erdoğan M., Karakaya İ.  
5th International Conference on Welding Technologies and Exhibition (ICWET'18), Sarajevo, Bosna-Hersek, 26 - 28 Eylül 2018, ss.56
- X. **Optimization of Mechanical Properties of Nickel-Cobalt Coatings from Sulphamate Baths**  
Karakaya E., Başkan M., Erdoğan M., Karakaya İ.  
233rd ECS Meeting, Washington, Amerika Birleşik Devletleri, 13 - 17 Mayıs 2018, ss.1305
- XI. **Electrochemical Removal of Copper from Regenerated Pickling Solutions of Steel Plants**  
Karakaya E., Aras M. S., Erdoğan M., Karagül S., Ersoy M., Karakaya İ.  
233rd ECS Meeting, Washington, Amerika Birleşik Devletleri, 13 - 17 Mayıs 2018, ss.1295
- XII. **Electrochemical Removal of Copper from Regenerated Pickling Solutions of Steel Plants**  
Karakaya E., Aras M. S., Erdoğan M., Karagül S., Ersoy M., Karakaya İ.  
233rd ECS Meeting, Washington, Amerika Birleşik Devletleri, 13 - 17 Mayıs 2018, ss.1295
- XIII. **An Electrochemical Procedure for Copper Removal from Regenerated Pickling Solutions of Steel Plants**  
Karakaya E., Aras M. S., ERDOĞAN M., Karagül S. C., Ersoy M. K., KARAKAYA İ.  
Energy Technologies Symposium, Arizona, Amerika Birleşik Devletleri, 11 - 15 Mart 2018, ss.275-281
- XIV. **Characterization of the Liquid Phase Sintered Tungsten Heavy Alloys Prepared by an Electrochemically Produced Tungsten Powder**  
Erol M., Erdoğan M., Karakaya İ.  
Powder Metallurgy of Light, Reactive and Other Non-ferrous Metals, TMS 2018, Arizona, Amerika Birleşik Devletleri, 11 - 15 Mart 2018, ss.1
- XV. **Characterization of the Liquid Phase Sintered Tungsten Heavy Alloys Prepared by an Electrochemically Produced Tungsten Powder**  
Erol M., Erdoğan M., Karakaya İ.  
Powder Metallurgy of Light, Reactive and Other Non-ferrous Metals, TMS 2018, Arizona, Amerika Birleşik Devletleri, 11 - 15 Mart 2018, ss.1
- XVI. **Investigation of the Mechanical Properties of Al<sub>2</sub>O<sub>3</sub> Reinforced Nickel Composite Coatings, Metal-Matrix Composites Innovations, Advances and Applications**  
Yılmaz O., Erdoğan M., Karakaya İ.  
TMS 2018, Arizona, Amerika Birleşik Devletleri, 11 - 15 Mart 2018, ss.1



- XVII. **Electrochemical Formation of Alloys of Scandium in Molten Salts**  
polat ç., ERDOĞAN M., iplikcioğlu S., KARAKAYA İ.  
TMS 2018, Phoenix, Amerika Birleşik Devletleri, 11 - 15 Mart 2018, ss.1555-1558
- XVIII. **Investigation of the Mechanical Properties of Al<sub>2</sub>O<sub>3</sub> Reinforced Nickel Composite Coatings**  
Yılmaz O., ERDOĞAN M., KARAKAYA İ.  
TMS 2018, Phoenix, 11 - 15 Mart 2018
- XIX. **Friction Reducing Composite Plating in Rocket Launchers. Uluslararası le**  
SARALOĞLU GÜLER E., KARAKAYA İ.  
2. Uluslararası Savunma Sanayii Sempozyumu, 6 - 08 Nisan 2017, cilt.9, ss.1-5
- XX. **EFFECTS OF COBALT AND IRON ALTERNATION ON THE BINDER PHASE COMPOSITION AND AVERAGE GRAIN SIZE OF W-Ni-X HEAVY ALLOYS,, PPM 2017 İzmir September 12-15 2017**  
EROL M., ERDOĞAN M., KARAKAYA İ.  
International Porous and Powder Materials Symposium, 12 - 15 Eylül 2017
- XXI. **Internal stress and friction measurements during MoS<sub>2</sub>-nickel electrodeposition. oma / İtalya 12/06/2017 - 14/06/2017**  
SARALOĞLU GÜLER E., KARAKAYA İ.  
9th World Congress on Materials Science Engineering, 12 - 14 Haziran 2017
- XXII. **Determination of Internal Stress of Ni Electroplated Samples in Sulphamate Solutions**  
Aykaç B., Erdogan M., KARAKAYA İ.  
Symposium on Plasma Nano Science and Technology held during the 231st Meeting of the Electrochemical-Society (ECS), Louisiana, Amerika Birleşik Devletleri, 28 Mayıs - 01 Haziran 2017, cilt.77, ss.1079-1084
- XXIII. **The use of Silicon Wafer Barriers in the Electrochemical Reduction of Solid Silica to Form Silicon in Molten Salts**  
AKPINAR B., ERDOĞAN M., Akduman B., KARAKAYA İ.  
Symposium on Plasma Nano Science and Technology held during the 231st Meeting of the Electrochemical-Society (ECS), Louisiana, Amerika Birleşik Devletleri, 28 Mayıs - 01 Haziran 2017, cilt.77, ss.2011-2016
- XXIV. **Formation and Characterization of Sub-Micron Inert Particle Embedded Nickel Composite Coatings**  
YILMAZ TÜZÜN Ö., ERDOĞAN M., KARAKAYA İ.  
Symposium on Plasma Nano Science and Technology held during the 231st Meeting of the Electrochemical-Society (ECS), Louisiana, Amerika Birleşik Devletleri, 28 Mayıs - 01 Haziran 2017, cilt.77, ss.1029-1034
- XXV. **Electrochemical Reduction of Molybdenum Compounds to Form Molybdenum Powder**  
akpınar b., ERDOĞAN M., KARAKAYA İ.  
231 st ECS Meeting, 29 Mayıs - 02 Haziran 2017
- XXVI. **A Molten Salt Electrolysis Procedure to Form Al-Sc Alloys**  
polat ç., ERDOĞAN M., KARAKAYA İ.  
231 st ECS Meeting, 29 Mayıs - 02 Haziran 2017
- XXVII. **Effects of Pulse-Reverse Currents on Nickel Deposited from Sulphamate Solutions**  
çetinöz B., ERDOĞAN M., aras m. s., KARAKAYA İ.  
231 st ECS Meeting, 29 Mayıs - 02 Haziran 2017
- XXVIII. **Electrochemical Reduction of Solid Silica to Form Silicon in Molten Salts**  
akpınar b., ERDOĞAN M., ergül e., akduman b., KARAKAYA İ.  
231 st ECS Meeting, 29 Mayıs - 02 Haziran 2017
- XXIX. **Corrosion Behavior and Cathodic Protection Modeling of a Selected Steel Component in Seawater**  
AKSU R., ERDOĞAN M., Meço H., KARAKAYA İ.  
IMMC'xx18, 29 Eylül - 01 Ekim 2016, ss.819-822
- XXX. **Corrosion Behaviors of Different Aluminum Alloys and Cathodic Protection Application to the Amphibious Military Vehicles**  
Uğuz R. O., Meço H., ERDOĞAN M., KARAKAYA İ.  
IMMC'xx18, 29 Eylül - 01 Ekim 2016, ss.826-829
- XXXI. **Liquid Phase Sintering Behaviour of Tungsten Powders Produced by the Electrochemical Reduction**  
EROL M., ERDOĞAN M., KARAKAYA İ.

- IMMC'xx18, 29 Eylül - 01 Ekim 2016, ss.650-653
- XXXII. **Eff ects of pH and Cobalt Concentration on the Properties of Nickel Cobalt Alloy Plating**  
Başkan M., ERDOĞAN M., KARAKAYA İ.  
IMMC'xx18, İstanbul, Türkiye, 29 Eylül - 01 Ekim 2016, ss.740-743
- XXXIII. **Investigation of the Larger Scale Tungsten Production by the Electrochemical Reduction Technique**  
ÖZDEMİR F., ERDOĞAN M., Elmadağlı M., KARAKAYA İ.  
IMMC'xx18, 29 Eylül - 01 Ekim 2016, ss.596-599
- XXXIV. **Amfibik Askeri Zırhlı Araçlarının Seçili Parçalarının Deniz Suyu Ortamında Katodik Koruma Modellemesi**  
Uğuz R. O., AKSU R., Meço H., ERDOĞAN M., KARAKAYA İ.  
KORSEM 14, 5 - 06 Ekim 2016
- XXXV. **Nickel and Gold Coatings of Germanium and Kovar Substrates**  
Cetin Y., ERDOĞAN M., Demirci G., KARAKAYA İ.  
Symposium on Industrial Electrochemistry and Electrochemical Engineering General Session held during the 229th Meeting of The Electrochemical-Society, California, Amerika Birleşik Devletleri, 29 Mayıs - 02 Haziran 2016, cilt.72, ss.55-64
- XXXVI. **Investigation, Modeling and Design of a Cathodic Protection System for Hull Structures in Marine Environment**  
Aksu R., Uğuz R. O., ERDOĞAN M., Meco H., KARAKAYA İ.  
Symposium on Corrosion General Session held during the 229th Meeting of The-Electrochemical-Society, California, Amerika Birleşik Devletleri, 29 Mayıs - 02 Haziran 2016, cilt.72, ss.163-170
- XXXVII. **Electropolishing of an Fe-Ni-Co Alloy in Acetic Acid-Perchloric Acid Mixture**  
Aksu Y., ERDOĞAN M., Demirci G., KARAKAYA İ.  
Symposium on Industrial Electrochemistry and Electrochemical Engineering General Session held during the 229th Meeting of The Electrochemical-Society, California, Amerika Birleşik Devletleri, 29 Mayıs - 02 Haziran 2016, cilt.72, ss.13-21
- XXXVIII. **Electropolishing of an Fe Ni Co Alloy in Acetic Acid Perchloric Acid Mixture F01 1131 Industrial Electrochemistry and Electrochemical Engineering General Session**  
Aksu Y., ERDOĞAN M., Demirci G., KARAKAYA İ.  
229th ECS Meeting, 29 Mayıs - 02 Haziran 2016
- XXXIX. **The Role of Electrolyte Composition on Codeposited Ag and Cu**  
KARAKAYA İ., Ulu F., Demirci G., ERDOĞAN M.  
229th ECS Meeting, 29 Mayıs - 02 Haziran 2016
- XL. **A Pulse Voltage Application in Electrochemical Reduction of Solid CaWO<sub>4</sub> Powder**  
KARAKAYA İ., ERDOĞAN M., Göksu G.  
ECS 229, 29 Mayıs - 02 Haziran 2016
- XLI. **In Search of an Alternative Solar Grade Silicon Production By Electrochemical Reduction of SiO<sub>2</sub>**  
Akpinar B., ERDOĞAN M., KARAKAYA İ.  
ECS 229, 29 Mayıs - 02 Haziran 2016, ss.2164
- XLII. **Investigation of Process Parameters for the Nickel Coatings from Sulphamate Baths NASHVILLE TENNESSEE USA 14 18 Feb 2016**  
Başkan M., ERDOĞAN M., KARAKAYA İ.  
TMS 2016, 14 - 18 Şubat 2016
- XLIII. **Investigation of the Corrosion Behavior of Selected Steel Types and Aluminum Alloys in Marine Environment**  
AKSU R., Uğuz O., ERDOĞAN M., Meço H., Aras M. S., KARAKAYA İ.  
TMS 2016, NASHVILLE, Amerika Birleşik Devletleri, 14 - 18 Şubat 2016
- XLIV. **Production of Tungsten by Pulse Current Reduction of CaWO<sub>4</sub>**  
ÖZDEMİR F., ERDOĞAN M., Elmadağlı M., KARAKAYA İ.  
TMS 2016, Nashville, Amerika Birleşik Devletleri, 14 - 18 Şubat 2016, ss.151-158
- XLV. **In situ Formation of Mg Ni Intermetallics by a two step Electrochemical Technique**

- KARAKAYA İ., ERDOĞAN M., Fuat E.  
mESC-IS 2015, Int. Symposium on Materials for Energy Storage and Conversion, Ankara, Türkiye, 7 - 09 Eylül 2015
- XLVI. **Preparation of Surfaces of Germanium and Kovar Substrates By Electroplating for Soldering**  
KARAKAYA İ., ERDOĞAN M., Çetin Y., Demirci G.  
227th Electrochem. Soc. Meeting, Chicago, Amerika Birleşik Devletleri, 24 - 28 Mayıs 2015
- XLVII. **Structural Properties of Electrolytic Nickel Deposits Produced By Direct Pulse and Pulse Reverse Currents in the Organic Free Watts Electrolytes**  
ARSLAN B., KARAKAYA İ., ERDOĞAN M., Demirci G.  
227th Electrochem. Soc. Meeting, Chicago, Amerika Birleşik Devletleri, 24 - 28 Mayıs 2015
- XLVIII. **Effect of Bath Composition on the Composition and Morphology of Electrodeposited Ag Cu Alloys**  
KARAKAYA İ., ERDOĞAN M., Ulu F., Demirci G.  
227th Electrochem. Soc. Meeting, Chicago, Amerika Birleşik Devletleri, 24 - 28 Mayıs 2015
- XLIX. **AN INTERRUPTED IN-SITU METHOD FOR ELECTROCHEMICAL FORMATION OF Mg-Ni INTERMETALLICS**  
Erden F., KARAKAYA İ., ERDOĞAN M.  
143rd TMS Annual Meeting & Exhibition, California, Amerika Birleşik Devletleri, 16 - 20 Şubat 2014, ss.683-693
- L. **Electrochemical Formation of Brazing Alloys on Metal Substrates**  
Ulu F., KARAKAYA İ., Demirci G., ERDOĞAN M.  
Symposium on Fundamentals of Electrochemical Growth - From UPD to Microstructures 3 held during the 224th Meeting of the Electrochemical-Society (ECS), San-Francisco, Kostarika, 27 Ekim - 01 Kasım 2013, cilt.58, ss.61-69
- LI. **Comparison of Structural Properties of Copper Deposits from Sulfate and Pyrophosphate Electrolytes**  
ARSLAN B., Ulgudur N., ERDOĞAN M., İMAMOĞLU İ., KARAKAYA İ.  
Symposium on Fundamentals of Electrochemical Growth - From UPD to Microstructures 3 held during the 224th Meeting of the Electrochemical-Society (ECS), San-Francisco, Kostarika, 27 Ekim - 01 Kasım 2013, cilt.58, ss.105-113
- LII. **MOLTEN SALT ELECTROLYSIS OF MgCl<sub>2</sub> IN A CELL WITH RAPID CHLORINE REMOVAL FEATURE**  
Demirci G., Karakaya İ.  
Symposium on Magnesium Technology held during TMS Annual Meeting and Exhibition, Florida, Amerika Birleşik Devletleri, 11 - 15 Mart 2012, ss.59-62
- LIII. **EFFECT OF ELECTROPLATING PARAMETERS ON "HER" CURRENT DENSITY IN Ni-MoS<sub>2</sub> COMPOSITE PLATING**  
Guler E. S., KARAKAYA İ., KONCA E.  
Symposium on Materials Processing and Interfaces from 141st TMS Annual Meeting and Exhibition, California, Amerika Birleşik Devletleri, 11 - 15 Mart 2012, ss.57-64
- LIV. **MIXTURE DESIGN APPLIED TO THE ELECTROCHEMICAL REDUCTION OF CaWO<sub>4</sub> TO W**  
Erdogan M., KARAKAYA İ., Goksu O. G.  
T T Chen Honorary Symposium on Hydrometallurgy, Electrometallurgy and Materials Characterization held during the 141st TMS Annual Meeting and Exhibition, Florida, Amerika Birleşik Devletleri, 11 - 15 Mart 2012, ss.761-767
- LV. **AN INVESTIGATION INTO THE ELECTROCHEMICAL PRODUCTION OF Si BY THE FFC CAMBRIDGE PROCESS**  
ERGUL E., KARAKAYA İ., Erdogan M., ERDEN F.  
Conference of the Extraction-and-Processing-Division (EPD) held during the 141st TMS Annual Meeting and Exhibition, Florida, Amerika Birleşik Devletleri, 11 - 15 Mart 2012, ss.455-462
- LVI. **RAPID REMOVAL OF CHLORINE IN MOLTEN SALT ELECTROLYSIS OF MAGNESIUM CHLORIDE**  
Demirci G., KARAKAYA İ.  
Symposium of the Extraction-and-Processing-Division (EPD) held during 140th TMS Annual Meeting and Exhibition, California, Amerika Birleşik Devletleri, 27 Şubat - 03 Mart 2011, ss.597-604
- LVII. **Reduction of porous silica pellets by electrodeoxidation in molten salts**  
Ergul E., KARAKAYA İ., Erdogan M.  
2009 MRS Fall Meeting, Boston, MA, Amerika Birleşik Devletleri, 29 Kasım - 03 Aralık 2009, cilt.1210, ss.139-144

- LVIII. Constant and pulse voltage applications in CaWO<sub>4</sub> reduction**  
Goksu O. G., KARAKAYA İ., Erdogan M.  
EPD Congress 2010 - TMS 2010 Annual Meeting and Exhibition, Seattle, WA, Amerika Birleşik Devletleri, 14 - 18 Şubat 2010, ss.387-394
- LIX. Effects of Rapid Chlorine Removal on the Electrolytic Magnesium Production**  
Demirci G., KARAKAYA İ.  
15. Uluslararası Metalurji ve Malzeme Konf, 19 Ekim 2010, ss.1310-1319
- LX. Topkaya Y Kul M and Karakaya İ Recovery of Rare Earths from a Bastnasite Preconcentrate Rare Earths and Actinides Science Technology and Applications IV TMS 2000 p 11 16**  
Topkaya Y. A., KUL M., KARAKAYA İ.  
TMS, warrendale, Amerika Birleşik Devletleri, 1 - 05 Şubat 2010, ss.11-16

## Ansiklopedide Bölümler

- I. ASM Handbook Volume 3 Alloy Phase Diagrams**  
Karakaya I., William T T.  
ASM International, ss.237, 257-259, 261-262,, 2001

## Desteklenen Projeler

- KARAKAYA İ., Diğer Özel Kurumlarca Desteklenen Proje, Pal İçin Elektroform Yöntemiyle Erozyon Kalkanı Üretimi, 2015 - Devam Ediyor
- KARAKAYA İ., BALTA A., Yükseköğretim Kurumları Destekli Proje, Erimiş Tuz İçerisinde Elektroindirgeme ile Tungsten Geri Kazanımı, 2022 - 2023
- KARAKAYA İ., DUMAN A., Yükseköğretim Kurumları Destekli Proje, Elektrokimyasal Yöntemlerle Bakır Kaplanmış Alüminyum Parçaların Sert Lehimleme Yöntemiyle Birleştirilmesi, 2022 - 2023
- KARAKAYA İ., POLAT Ç., Yükseköğretim Kurumları Destekli Proje, ERİMİŞ TUZ İÇERİSİNDE ELEKTROKİMYASAL YÖNTEMLE AL-SC ALAŞIMI OLUŞTURULMASI, 2018 - 2019
- KARAKAYA İ., ALTUNBAŞAK T., Yükseköğretim Kurumları Destekli Proje, Değerli Parçacık Gömülü Kompozit Atıkların Entegre Geri Dönüşümü, 2018 - 2019
- KARAKAYA İ., Yükseköğretim Kurumları Destekli Proje, SİLİNDİRİK AKORDİYON GEOMETRİSİNİN ELECTROFORM YÖNTEMİ İLE OLUŞTURULMASI VE KARAKTERİZASYONU, 2017 - 2017
- KARAKAYA İ., YILMAZ O., Yükseköğretim Kurumları Destekli Proje, MİKRON ALTI İKİNCİ PARÇACIK GÖMÜLÜ NİKEL BAZLI KOMPOZİT KAPLAMANIN ELEKTROLİZLE ŞEKİLLENDİRME YÖNTEMİYLE OLUŞTURULMASI VE KARAKTERİZASYONU, 2017 - 2017
- KARAKAYA İ., Yükseköğretim Kurumları Destekli Proje, REFRAKTER METAL MOLİBDEN TOZUNUN ELEKTROKİMYASAL YÖNTEMLE ÜRETİMİ, 2017 - 2017
- KARAKAYA İ., Yükseköğretim Kurumları Destekli Proje, ERİMİŞ TUZ İÇERİSİNDE ELEKTROKİMYASAL YÖNTEMLE AL-SC ALAŞIMI OLUŞTURULMASI, 2017 - 2017
- KARAKAYA İ., Yükseköğretim Kurumları Destekli Proje, Mg-Ni Metaller Arası Bileşiklerinin Erimiş Tuz İçerisinde Üretilmesi, 2012 - 2013

## Patent

- KARAKAYA İ., Elektrodeoksidasyon ve Erişim Tuz Elektrolizi Metotlarının Intermetalik ve/veya Alaşım Üretmek için Birleştirilmesi, Patent, BÖLÜM C Kimya; Metalürji, Standart Tescil, 2016
- Karakaya İ., Tungsten içeren bileşiklerden elektrokimyasal metotlarla tungsten ve tungsten alaşımları kazanımı, Patent, BÖLÜM C Kimya; Metalürji, Buluşun Tescil No: TR2007 07197B , Standart Tescil, 2010

## **Metrikler**

Yayın: 123

Atıf (WoS): 447

Atıf (Scopus): 495

H-İndeks (WoS): 11

H-İndeks (Scopus): 13

## **Akademi Dışı Deneyim**

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