

## **Prof. İSHAK KARAKAYA**

### **Personal Information**

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### **Education Information**

Doctorate, Mcgill University, Metalurji Mühendisliği, Canada 1981 - 1985

Post Graduate, Mcgill University, Metalurji Mühendisliği, Canada 1979 - 1981

Under Graduate, Middle East Technical University, Faculty of Engineering, Department of Metallurgical and Materials Engineering, Turkey 1973 - 1978

### **Foreign Languages**

English, C1 Advanced

### **Research Areas**

Technical Sciences, Metallurgical and Materials Engineering, Production Metallurgy, Non-Ferrous Alloy Production, Electrolytic Coating, Electrometallurgy

### **Academic Titles / Tasks**

Professor, Middle East Technical University, Faculty of Engineering, Department of Metallurgical and Materials Engineering, 1994 - Continues

Associate Professor, Middle East Technical University, Faculty of Engineering, Department of Metallurgical and Materials Engineering, 1988 - 1994

Assistant Professor, Middle East Technical University, Faculty of Engineering, Department of Metallurgical and Materials Engineering, 1987 - 1988

### **Professional Experience**

Deputy Head of Department, Middle East Technical University, Faculty of Engineering, Department of Metallurgical and Materials Engineering, 2003 - 2006

### **Courses**

Materials Processing, Under Graduate, 2018 - 2019

## Advising Theses

- KARAKAYA İ., Değerli Parçacık Gömülü Kompozit Atıkların Entegre Geri Dönüşümü, Post Graduate, T.GÖYNÜK(Student), 2019
- KARAKAYA İ., Formation and characterization of electroformed cylindrical accordion geometry, Post Graduate, B.ÇETİNÖZ(Student), 2018
- KARAKAYA İ., Electroformation and characterization of Al<sub>2</sub>O<sub>3</sub> embedded nickel matrix composite coatings, Post Graduate, O.YILMAZ(Student), 2018
- KARAKAYA İ., Cathodic protection of aluminum components of armoured amphibious vehicles in marine environment, Post Graduate, R.ONUR(Student), 2017
- KARAKAYA İ., Cathodic Protection of Steel Components of Armoured Amphibious Vehicles in Marine Environment, Post Graduate, R.AKSU(Student), 2017
- KARAKAYA İ., Electrochemical production of tungsten refractory metal powders, Post Graduate, F.ÖZDEMİR(Student), 2017
- KARAKAYA İ., Computer simulation of processes involving multicomponent multiphase equilibria, Post Graduate, M.SERDAL(Student), 2016
- KARAKAYA İ., EFFECTS OF ANODIZING PARAMETERS ON THE FORMATION OF TITANIUM DIOXIDE NANOTUBE ARRAYS ON Ti<sub>6</sub>Al<sub>4</sub>V ALLOY, Post Graduate, Z.AYÇA(Student), 2015
- KARAKAYA İ., Electrochemical formation of brazing alloys on metal substrates, Post Graduate, F.JULU(Student), 2014
- KARAKAYA İ., KALKANLI A., Liquid phase sintering of tungsten-nickel-cobalt heavy alloys, Post Graduate, O.DİNÇER(Student), 2014
- KARAKAYA İ., Formation of Indium Solder Material by Electrochemical Methods, Post Graduate, O.ORKUT(Student), 2014
- KARAKAYA İ., ELECTROCHEMICAL FORMATION OF COLD SHIELD FOR OPTOELECTRONIC DEVICES, Post Graduate, B.ARSLAN(Student), 2014
- KARAKAYA İ., Effect of chromium on the oxidation of steels used in the construction of petroleum refinery heaters, Doctorate, A.SULTAN(Student), 2013
- KARAKAYA İ., Electrocodeposition of molybdenum disulfide particles in nickel matrix, Doctorate, E.SARALOĞLU(Student), 2013
- KARAKAYA İ., Recovery of tungsten from tungsten bearing compounds, Doctorate, M.ERDOĞAN(Student), 2013
- KARAKAYA İ., In-situ Formation of Mg-Ni Intermetallics, Post Graduate, F.ERDEN(Student), 2013
- KARAKAYA İ., Production of Tungsten by Pulsed Potential Electroreduction, Post Graduate, O.GÖKÇE(Student), 2011
- KARAKAYA İ., Reduction of silicon dioxide by electrochemical deoxidation, Post Graduate, E.ERGÜL(Student), 2010
- ÖZTÜRK T., KARAKAYA İ., Ferroboron production by electrodeoxidation, Post Graduate, T.ÖRS(Student), 2008
- KARAKAYA İ., Tungsten production by electrodeoxidation, Post Graduate, M.ERDOĞAN(Student), 2007
- KARAKAYA İ., Electrolytic magnesium production using coaxial electrodes, Doctorate, G.DEMİRCİ(Student), 2006
- KARAKAYA İ., High temperature corrosion of steels used in petroleum refinery heaters, Post Graduate, A.SULTAN(Student), 2005
- KARAKAYA İ., Hydrometallurgical treatment of Beylikahır rare earth preconcentrate, Doctorate, M.KUL(Student), 2003
- KARAKAYA İ., Yiterbiyum-baryum-bakır oksit süperiletken şeritlerin sol-jel metodu ile üretimi ve karakterizasyonu, Doctorate, H.OKUYUCU(Student), 2002
- KARAKAYA İ., Development of a computer program for multi-element predominance area diagrams, Post Graduate, E.KONCA(Student), 2000
- KARAKAYA İ., Development of a computer program for thermodynamic calculation of binary phase diagrams, Post Graduate, İ.NUMANOĞLU(Student), 1999
- KARAKAYA İ., Molten salt electrolysis of magnesium and its hydrodynamics, Post Graduate, G.DEMİRCİ(Student), 1998
- KARAKAYA İ., High temperature corrosion of boiler plant flues, Post Graduate, İ.ATİK(Student), 1998
- KARAKAYA İ., Purification of magnesium-lead alloy by molten salt electrolysis, Post Graduate, K.ÇITAK(Student), 1998
- KARAKAYA İ., Kalay-bizmut sisteminin termodinamiği, Post Graduate, H.OKUYUCU(Student), 1997
- KARAKAYA İ., An interactive computer program for predominance area diagrams, Post Graduate, M.MURAT(Student), 1994
- KARAKAYA İ., Development of an interactive computer program for ternary phase diagrams (Using thermodynamic data), Post Graduate, S.KEMAL(Student), 1992

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

- **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, vol.77, pp.82-89, 2018 (Journal Indexed in SCI)
- **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, vol.13, pp.10934-10947, 2018 (Journal Indexed in SCI)
- **Formation and characterization of infrared absorbing copper oxide surfaces**  
Arslan B., Demirci G., Erdogan M., Karakaya İ.  
APPLIED SURFACE SCIENCE, vol.402, pp.218-224, 2017 (Journal Indexed in SCI)
- **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, vol.11, pp.418-432, 2017 (Journal Indexed in SCI)
- **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, vol.50, pp.106-112, 2015 (Journal Indexed in SCI)
- **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, vol.9, pp.6627-6639, 2014 (Journal Indexed in SCI)
- **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, vol.30, pp.109-114, 2014 (Journal Indexed in SCI)
- **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, vol.8, pp.5496-5505, 2013 (Journal Indexed in SCI)
- **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, vol.43, pp.667-670, 2012 (Journal Indexed in SCI)
- **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, vol.63, pp.119-126, 2012 (Journal Indexed in SCI)
- **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, vol.509, pp.899-903, 2011 (Journal Indexed in SCI)
- **Direct synthesis of Mg-Ni compounds from their oxides**  
Tan S., Aydinol K., ÖZTÜRK T., KARAKAYA İ.  
JOURNAL OF ALLOYS AND COMPOUNDS, vol.504, pp.134-140, 2010 (Journal Indexed in SCI)

● **Electrochemical Reduction of Tungsten Compounds to Produce Tungsten Powder**

ERDOĞAN M., KARAKAYA İ.

METALLURGICAL AND MATERIALS TRANSACTIONS B-PROCESS METALLURGY AND MATERIALS PROCESSING SCIENCE, vol.41, pp.798-804, 2010 (Journal Indexed in SCI)

● **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, vol.44, pp.3514-3519, 2009 (Journal Indexed in SCI)

● **Synthesis of FeTi from mixed oxide precursors**

Tan S., Oers T., AYDINOL M. K. , ÖZTÜRK T., KARAKAYA İ.

JOURNAL OF ALLOYS AND COMPOUNDS, vol.475, pp.368-372, 2009 (Journal Indexed in SCI)

● **Electrolytic magnesium production and its hydrodynamics by using an Mg-Pb alloy cathode**

Demirci G., KARAKAYA İ.

JOURNAL OF ALLOYS AND COMPOUNDS, vol.465, pp.255-260, 2008 (Journal Indexed in SCI)

● **Rare earth double sulfates from pre-concentrated bastnasite**

Kul M., TOPKAYA Y. A. , KARAKAYA İ.

HYDROMETALLURGY, vol.93, pp.129-135, 2008 (Journal Indexed in SCI)

● **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, vol.439, pp.237-242, 2007 (Journal Indexed in SCI)

● **ELECTROLYSIS OF MGCL<sub>2</sub> WITH A TOP INSERTED ANODE AND AN MG PB CATHODE**

GUDEN M., KARAKAYA İ.

JOURNAL OF APPLIED ELECTROCHEMISTRY, vol.24, pp.791-797, 1994 (Journal Indexed in SCI)

● **The Ag Se Silver Selenium System**

KARAKAYA İ., Thompson W. T.

Bulletin of Alloy Phase Diagrams, vol.11, pp.266-271, 1990 (Journal Indexed in SCI Expanded)

● **The Ag B Silver Boron System**

KARAKAYA İ.

Bulletin of Alloy Phase Diagrams, vol.11, pp.547, 1990 (Journal Indexed in SCI Expanded)

● **The Ag Mn Silver Manganese System**

KARAKAYA İ.

Bulletin of Alloy Phase Diagrams, vol.11, pp.480-486, 1990 (Journal Indexed in SCI Expanded)

● **The Ag N Silver Nitrogen System**

KARAKAYA İ.

Bulletin of Alloy Phase Diagrams, vol.11, pp.486-487, 1990 (Journal Indexed in SCI Expanded)

● **ADVICE SYSTEM ON HIGH-TEMPERATURE ALLOY CORROSION**

JOHN R., THOMPSON W., KARAKAYA I.

MATERIALS PERFORMANCE, vol.28, pp.69-73, 1989 (Journal Indexed in SCI)

● **The Ag P Silver Phosphorus System**

KARAKAYA İ.

Bulletin of Alloy Phase Diagrams, vol.9, pp.232-236, 1988 (Journal Indexed in SCI Expanded)

● **The Ag Re Silver Rhenium System**

KARAKAYA İ.

Bulletin of Alloy Phase Diagrams, vol.9, pp.243-244, 1988 (Journal Indexed in SCI Expanded)

● **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, vol.135, pp.122-126, 1988 (Journal Indexed in SCI)

● **The Ag Pb Silver Lead System**

KARAKAYA İ.

Bulletin of Alloy Phase Diagrams, vol.8, pp.326-334, 1987 (Journal Indexed in SCI Expanded)

● **A THERMODYNAMIC STUDY OF THE SYSTEM MGCL<sub>2</sub>-NACL-CACL<sub>2</sub>**

KARAKAYA İ., THOMPSON W.

CANADIAN METALLURGICAL QUARTERLY, vol.25, pp.307-317, 1986 (Journal Indexed in SCI)

**THERMODYNAMIC PROPERTIES OF MGCL<sub>2</sub>-NACL MELTS FROM EMF-MEASUREMENTS**

KARAKAYA İ., thompson w.

JOURNAL OF THE ELECTROCHEMICAL SOCIETY, vol.133, pp.702-706, 1986 (Journal Indexed in SCI)

**Thermodynamic properties of 1 x MgCl<sub>2</sub> xCaCl<sub>2</sub> melts**

KARAKAYA İ., thompson w.

J. Chemical Thermodynamics, vol.18, pp.859-866, 1986 (Journal Indexed in SCI Expanded)

**The Ag Ir Silver Iridium System**

KARAKAYA İ.

Bulletin of Alloy Phase Diagrams, vol.7, pp.359-360, 1986 (Journal Indexed in SCI Expanded)

**The Ag Os Silver Osmium System**

KARAKAYA İ., thompson w.

Bulletin of Alloy Phase Diagrams, vol.7, pp.360-362, 1986 (Journal Indexed in SCI Expanded)

**Introduction of boundary conditions in the Pelton Flengas Gibbs Duhem Integration for ternary solutions**

KARAKAYA İ., thompson w.

Canadian Journal of Chemistry, vol.63, pp.2808-2809, 1985 (Journal Indexed in SCI Expanded)

**Correction**

KARAKAYA İ., thompson w.

Can. J. Chem., vol.63, pp.3634, 1985 (Journal Indexed in SCI Expanded)

**Thermodynamic properties of SnO in SnO TiO<sub>2</sub> melts**

KARAKAYA İ., William T T.

Canadian Metallurgical Quarterly, vol.22, pp.61-65, 1983 (Journal Indexed in SCI Expanded)

## Articles Published in Other Journals

**Effects of Pulse Electroplating Parameters on Return Loss (S<sub>11</sub>) and Surface Roughness of Silver Coatings**

Başaran C., KARAKAYA İ.

ECSArxiv, 2019 (Refereed Journals of Other Institutions)

**ERİMİŞ TUZ İÇİNDE ELEKTROKİMYASAL İNDİRGEME YÖNTEMİYLE SİLİSYUM ÜRETİMİ**

ERDOĞAN M., Ergül E., KARAKAYA İ.

Selçuk Üniversitesi Mühendislik Bilim ve Teknoloji Dergisi, 2017 (Other Refereed National Journals)

**Katı Molibden Bileşiklerinin Elektrokimyasal İndirgenmesiyle Molibden Üretimi**

ERDOĞAN M., Akpınar B., KARAKAYA İ.

Çukurova Üniversitesi Mühendislik Mimarlık Fakültesi Dergisi, 2017 (Other Refereed National Journals)

**Taguchi Design of Internal Stress and Friction Measurements during Electrodeposition**

SARALOĞLU GÜLER E., KARAKAYA İ.

Journal of Material Science Engineering, vol.6, 2017 (Refereed Journals of Other Institutions)

**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 (Other Refereed National Journals)

**Oxidation of Low Chromium Steels in Dry and Moist Atmospheres**

ERDOĞAN M., SULTAN a., KARAKAYA İ.

OXIDATION COMMUNICATIONS, vol.40, pp.51-60, 2017 (Refereed Journals of Other Institutions)

**A Pulse Voltage Application in Electrochemical Reduction of Solid CaWO<sub>4</sub> Powder**

Goksu O. G. , ERDOĞAN M., KARAKAYA İ.

ECS Transactions, vol.72, pp.31-39, 2016 (Refereed Journals of Other Institutions)

- **The Role of Electrolyte Composition on Codeposited Ag and Cu**  
ulu f., Demici G., ERDOĞAN M., KARAKAYA İ.  
ECS Transactions, vol.72, pp.35-44, 2016 (Refereed Journals of Other Institutions)
- **Formation of gold plated electroformed copper structures**  
ARSLAN B., Demirci G., KARAKAYA İ., ERDOĞAN M.  
Advances in Materials and Processing Technologies, vol.1, pp.384-393, 2016 (Refereed Journals of Other Institutions)
- **Formation of Titanium Dioxide Nanotube Arrays by Anodizing Ti6Al4V Alloy**  
KARAKAYA İ., ERDOĞAN M.  
ECS Transactions, vol.58, pp.45-52, 2014 (Refereed Journals of Other Institutions)
- **The Ag Pd Silver Palladium System**  
KARAKAYA İ., William T T.  
Bulletin of Alloy Phase Diagrams, vol.9, pp.237-243, 1988 (Refereed Journals of Other Institutions)
- **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, pp.1-3, 1988 (Refereed Journals of Other Institutions)
- **The Ag C Silver Carbon System**  
KARAKAYA İ., William T T.  
Bulletin of Alloy Phase Diagrams, vol.9, pp.226-227, 1988 (Refereed Journals of Other Institutions)
- **The Pb Sn Lead Tin System**  
KARAKAYA İ., William T T.  
Bulletin of Alloy Phase Diagrams, vol.9, pp.144-152, 1988 (Refereed Journals of Other Institutions)
- **The Ag Pt Silver Platinum System**  
KARAKAYA İ., William T T.  
Bulletin of Alloy Phase Diagrams, vol.8, pp.334-340, 1987 (Refereed Journals of Other Institutions)
- **The Ag Sn Silver Tin System**  
Karakaya İ., William T T.  
Bulletin of Alloy Phase Diagrams, vol.8, pp.340-347, 1987 (Journal Indexed in ESCI)
- **The Ag Rh Silver Rhodium System**  
KARAKAYA İ., William T T.  
Bulletin of Alloy Phase Diagrams, vol.7, pp.362-365, 1986 (Refereed Journals of Other Institutions)
- **The Ag Co Silver Cobalt System**  
KARAKAYA İ., William T T.  
Bulletin of Alloy Phase Diagrams, vol.7, pp.259-263, 1986 (Refereed Journals of Other Institutions)
- **The Ag Ru Silver Ruthenium System**  
KARAKAYA İ., William T T.  
Bulletin of Alloy Phase Diagrams, vol.7, pp.365-368, 1986 (Refereed Journals of Other Institutions)

## Refereed Congress / Symposium Publications in Proceedings

- **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 May 2019
- **Electrochemical Deposition of Au-Ag-Cu Alloys on CuBe2**  
Çetinöz B., Erdoğan M., Karakaya İ., Yurdakul E. B.  
19th International Metallurgy and Materials Congress, ISTANBUL (IMMC 2018), İstanbul, Turkey, 25 - 27 October 2018, pp.1052-1056
- **Electrochemical Formation of Alloys of Aluminum in Molten Salts**

Polat Ç., Erdoğan M., Karakaya İ.

19th International Metallurgy and Materials Congress (IMMC 2018), İstanbul, Turkey, 25 - 27 October 2018, pp.132-135

● **Collection of Metal Powders From Recycled Hard Particle Embedded Composite Cutting Tools**

Altunbaşak T., Kul M., Karakaya İ.

19th International Metallurgy and Materials Congress (IMMC 2018), İstanbul, Turkey, 25 - 27 October 2018, pp.692-695

● **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, Turkey, 25 - 27 October 2018, pp.1008-1011

● **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, Bosnia And Herzegovina, 26 - 28 September 2018, pp.56

● **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, Bosnia And Herzegovina, 26 - 28 September 2018, pp.56

● **Powder Copper Extraction and Diamond Recovery from Scrapped Saw Blades by Electro Dissolution-Deposition**

Kul M., Oskay K. O. , Karasungur O., Kumruoğlu L. C. , Karakaya İ., Şimşir M., Korkmaz S., Ertaş H. A.

4th INTERNATIONAL SYMPOSIUM ON ENVIRONMENT AND MORALS (ISEM2018), Sarajevo, Bosnia And Herzegovina, 27 - 29 June 2018, pp.476-486

● **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, United States Of America, 13 - 17 May 2018, pp.1295

● **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, United States Of America, 13 - 17 May 2018, pp.1295

● **Optimization of Mechanical Properties of Nickel-Cobalt Coatings from Sulphamate Baths**

Karakaya E., Başkan M., Erdoğan M., Karakaya İ.

233rd ECS Meeting, Washington, United States Of America, 13 - 17 May 2018, pp.1305

● **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, United States Of America, 11 - 15 March 2018, pp.1

● **Complete Recycling of Waste Diamond Cutting Tools by an Electrochemical Method**

Altunbaşak T., Kul M., Karakaya İ.

TMS 2018, Arizona, United States Of America, 11 - 15 March 2018, pp.1

● **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, United States Of America, 11 - 15 March 2018, pp.275-281

● **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, United States Of America, 11 - 15 March 2018, pp.1

● **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, United States Of America, 11 - 15 March 2018, pp.1

### **Electrochemical Formation of Alloys of Scandium in Molten Salts**

polat ç., ERDOĞAN M., iplikçioğlu S., KARAKAYA İ.

TMS 2018, Phoenix, United States Of America, 11 - 15 March 2018, pp.1555-1558

### **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 March 2018

### **Friction Reducing Composite Plating in Rocket Launchers. Uluslararası İle**

SARALOĞLU GÜLER E., KARAKAYA İ.

2. Uluslararası Savunma Sanayii Sempozyumu, 6 - 08 April 2017, vol.9, pp.1-5

### **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 September 2017

### **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 June 2017

### **Determination of Internal Stress of Ni Electroplated Samples in Sulphamate Solutions**

Aykac B., Erdogan M., KARAKAYA İ.

Symposium on Plasma Nano Science and Technology held during the 231st Meeting of the Electrochemical-Society (ECS), Louisiana, United States Of America, 28 May - 01 June 2017, vol.77, pp.1079-1084

### **An Electrochemical Procedure to Form Metal Powders from Recycled Hard Particle Embedded Composite Cutting Tools**

Altunbasak T., KUL M., KARAKAYA İ.

Symposium on Plasma Nano Science and Technology held during the 231st Meeting of the Electrochemical-Society (ECS), Louisiana, United States Of America, 28 May - 01 June 2017, vol.77, pp.1035-1041

### **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, United States Of America, 28 May - 01 June 2017, vol.77, pp.2011-2016

### **Formation and Characterization of Sub-Micron Inert Particle Embedded Nickel Composite Coatings**

YILMAZ TÜZÜN Ö., ERDOĞAN M., KARAKAYA İ.

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