

## Prof. MUAMMER KAYA

### Personal Information

**Office Phone:** [+90 222 239 3750](tel:+902222393750) Extension: 3428

**Fax Phone:** [+90 222 239 3613](tel:+902222393613)

**Email:** [mkaya@ogu.edu.tr](mailto:mkaya@ogu.edu.tr)

**Other Email:** [muammerkaya26@gmail.com](mailto:muammerkaya26@gmail.com)

**Web:** <https://avesis.ogu.edu.tr/mkaya>

**Address:** ESOGÜ, MMF Dekanlığı, B. Meşelik, Eskişehir, 26040.

### International Researcher IDs

ScholarID: H1YZ3YoAAAAJ

ORCID: 0000-0001-5260-2589

Publons / Web Of Science ResearcherID: I-6424-2019

ScopusID: 12143332000

Yoksis Researcher ID: 2834

### Education Information

Doctorate, McGill University, Engineering Faculty, Metallurgical Eng., Canada 1985 - 1989

Postgraduate, McGill University, Engineering Faculty, Metallurgical Eng., Canada 1983 - 1985

Undergraduate, Anadolu University, Eskişehir State Academy Of Engineering And Architecture, Maden Mühendisliği Pr., Turkey 1977 - 1981

### Foreign Languages

English, C2 Mastery

### Dissertations

Doctorate, Flotasyonda Köpük Yıkama, McGill University, Engineering Faculty, Metallurgical Eng., 1989

Postgraduate, Flotasyon Kinetiği, McGill University, Maden Mühendisliği, 1985

### Research Areas

Mining Engineering and Technology, Physical Chemistry of Extraction and Refining, Benefication by Gravity, Dense-Medium, Magnetic and Electrostatic, Flotation and Flocculation, Process and Plant Design, Chemical-Biological Winning Techniques and Mineral Processing, Engineering and Technology

### Academic Titles / Tasks

Professor, Eskişehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, MADEN MÜHENDİSLİĞİ BÖLÜMÜ, 1999 - Continues

Associate Professor, Eskişehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, MADEN MÜHENDİSLİĞİ

BÖLÜMÜ, 1993 - 1999

Assistant Professor, Eskisehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, MADEN MÜHENDİSLİĞİ BÖLÜMÜ, 1990 - 1993

Research Assistant, Eskisehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, MADEN MÜHENDİSLİĞİ BÖLÜMÜ, 1981 - 1983

## Academic and Administrative Experience

Dean, Eskisehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, MADEN MÜHENDİSLİĞİ BÖLÜMÜ, 2020 - Continues

Eskisehir Osmangazi University, ESKİŞEHİR MESLEK YÜKSEKOKULU, 2010 - 2012

Director of the Center, Eskisehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, MADEN MÜHENDİSLİĞİ BÖLÜMÜ, 1995 - 2010

Eskisehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, Maden Mühendisliği Bölümü, 1994 - 1996

## Courses

Flowsheet Development Techniques, Doctorate, 2020 - 2021

Mineral Processing Plant Design, Undergraduate, 2020 - 2021

Mineral Processing III (Flotation), Undergraduate, 2020 - 2021

Materials and Metallurgy, Undergraduate, 2020 - 2021

Kolloid ve Yüzey Kimyası, Doctorate, 2020 - 2021

Chemistry Lab., Undergraduate, 2020 - 2021

Chemistry, Undergraduate, 2016 - 2017

Flotation Chemistry, Postgraduate, 2016 - 2017

## Advising Theses

Kaya M., Lityum İyon Pillerin Geri Dönüşümü- Maden Mühendisliği Açısından, Postgraduate, U.Kar(Student), 2023

Kaya M., Recycling of Oxidized Pb-Zn Flotation Tailings using Alkaline and Organic Acid Solutions by Hydro- and Biohydro-Metallurgical Methods, Postgraduate, A.MANKA(Student), 2022

Kaya M., Pb ve Zn flotasyon atıklarından baz ve kıymetli metallerin entegre eko-teknoloji ile seçimli kazanımı, Doctorate, S.HUSSAINI(Student), 2019

Kaya M., Çaldağ lateritik nikel cevherinden liç ve solvent ekstraksiyon ile nikel ve kobalt kazanımı, Doctorate, S.KURŞUNOĞLU(Student), 2016

KAYA M., Atık/kullanılmış çinko-karbo ve alaki pillerden çinko ve managnın geri kazanılması, Postgraduate, S.KURŞUNOĞLU(Student), 2010

KAYA M., Mermer fabrikaları toz atıklarının değerlendirilmesi, Postgraduate, M.BİLENSOY(Student), 2010

KAYA M., Atık çinko-karbon ve alkali pillerden çinko ve karbonun geri kazanılması, Postgraduate, M.SENEM(Student), 2009

KAYA M., Süper iletken magnezyumdiborid (MgB<sub>2</sub>) üretim teknolojisi, Postgraduate, D.DEVECİOĞLU(Student), 2005

KAYA M., Seyitömer ve Soma linyit kömürleri için zenginleştirme tesis tasarımı, Postgraduate, A.GİTMEZ(Student), 2005

KAYA M., Kırşehir bölgesi alkali siyenitlerinin zenginleştirilmesi, Postgraduate, Y.VAROL(Student), 2002

KAYA M., Kütahya Gümüşköy gümüş cevherinde verim artırma çalışmaları, Doctorate, D.ÖZ(Student), 2002

KAYA M., Kümaş elektro-filtre manyezit tozu artıklarından magnezyum bileşikleri (MgO, Mg(OH)<sub>2</sub>, MgCl<sub>2</sub>, MgB<sub>2</sub>) üretimi, Doctorate, N.ERDOĞAN(Student), 2002

KAYA M., Flotasyon makine tasarımı, Doctorate, İ.BENTLİ(Student), 2000

KAYA M., Seyitömer Havzası kömürlerinin yıkanabilirlik özelliklerinin belirlenmesi ve otisca prosesinin

uygulanabilirliğinin araştırılması, Doctorate, H.KOCA(Student), 1995  
KAYA M., Tane dağılımının tuğla kalitesi üzerine etkisi, Postgraduate, N.ERDOĞAN(Student), 1995  
KAYA M., Mürekkep gidermenin fizikokimyası, Postgraduate, D.ÖZ(Student), 1995  
KAYA M., Aydın-Çine feldspatlarının özellikleri ve flotasyon yöntemi ile zenginleştirilmesi, Doctorate, G.SÜMER(Student), 1994  
KAYA M., Doğal zeolit ile atık sulardan ağır metal iyonlarının uzaklaştırılması, Doctorate, H.KURAMA(Student), 1994  
KAYA M., Kütahya 100.yıl gümüş tesislerinin kırma ve eleme ünitesinin incelenerek alternatif akım şemasının oluşturulması, Postgraduate, K.BENDER(Student), 1993  
KAYA M., Magnezitin kolon flotasyonu ile zenginleştirilmesi, Doctorate, S.ÖNÇEK(Student), 1993  
KAYA M., Cevher hazırlamada bilgisayar uygulamaları, Postgraduate, H.TUNCER(Student), 1993  
KAYA M., Artık kağıdın flotasyon yoluyla mürekkepsizleştirilmesi, Postgraduate, H.ALP(Student), 1993  
KAYA M., Magnezit'in kalsinasyon + gravite yöntemi (ağır ortam) ile zenginleştirilmesi, Postgraduate, C.ÖZCAN(Student), 1992

## Jury Memberships

Appointment to Academic Staff - Associate Professorship, Appointment to Academic Staff - Associate Professorship, Adana Alparslan Türkeş Bilim Ve Teknoloji Üniversitesi, October, 2023

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

- I. **An overview of NdFeB magnets recycling technologies**  
KAYA M.  
Current Opinion in Green and Sustainable Chemistry, vol.46, 2024 (SCI-Expanded)
- II. **Leaching of Nickel and Cobalt from a Mixed Nickel-Cobalt Hydroxide Precipitate Using Organic Acids**  
Hussaini S., Tita A. M., Kursunoglu S., KAYA M., Chu P.  
MINERALS, vol.14, no.3, 2024 (SCI-Expanded)
- III. **Post-Leaching of Silver from a Non-Sulfide Lead-Zinc Ore Flotation Tailing Leach Residue in a Copper-Ammonium Thiosulfate Solution: A Fuzzy Logic Prediction**  
Hussaini S., Tita A., Kursunoglu S., Kursunoglu N., TOP S., KAYA M.  
Journal of Mining Science, vol.59, no.2, pp.320-330, 2023 (SCI-Expanded)
- IV. **Recovery of Lithium from Spent Coin-Type Lithium Manganese Dioxide CR Cells by Acidic Leaching in the Presence of Potassium Permanganate as Oxidant**  
Kursunoglu S., TOP S., ALTINER M., Ozsarac S., KAYA M.  
JOM, vol.75, no.2, pp.370-380, 2023 (SCI-Expanded)
- V. **Recovery of Lead and Zinc from a Citric Leach Solution of a Non-sulfide Type Ore Flotation Tailing via Precipitation Followed by Solvent Extraction**  
Hussaini S., Tita A. M., Kurşunoğlu S., Top S., Kaya M.  
JOM, vol.75, no.2, pp.1-10, 2023 (SCI-Expanded)
- VI. **Pb-Zn recovery from a malic leach solution of a carbonate type ore flotation tailing by precipitation and solvent extraction**  
Hussaini S., Tita A. M., KURŞUNOĞLU S., TOP S., Ichlas Z. T., Kar U., KAYA M.  
Separation and Purification Technology, vol.272, 2021 (SCI-Expanded)
- VII. **Testing of 17-different leaching agents for the recovery of zinc from a carbonate-type Pb-Zn ore flotation tailing**  
Hussaini S., KURŞUNOĞLU S., TOP S., Ichlas Z. T., KAYA M.  
Minerals Engineering, vol.168, 2021 (SCI-Expanded)
- VIII. **The effect of boric acid content on the properties of electrochemically prepared ni-fe/ito thin films**  
Saraç U., KAYA M., BAYKUL M. C.

Digest Journal of Nanomaterials and Biostructures, vol.16, no.3, pp.1137-1145, 2021 (SCI-Expanded)

- IX. **Selection of an appropriate acid type for the recovery of zinc from a flotation tailing by the analytic hierarchy process**  
KURŞUNOĞLU S., Kursunoglu N., Hussaini S., KAYA M.  
Journal of Cleaner Production, vol.283, 2021 (SCI-Expanded)
- X. **Production of mixed rare earth oxide powder from a thorium containing complex Bastnasite ore**  
KURŞUNOĞLU S., Hussaini S., TOP S., Ichlas Z. T., GÖKÇEN H. S., Ozsarac S., KAYA M.  
Powder Technology, vol.379, pp.641-654, 2021 (SCI-Expanded)
- XI. **Selective leaching of a mixed nickel-cobalt hydroxide precipitate in sulphuric acid solution with potassium permanganate as oxidant**  
Hussaini S., Ichlas Z. T., TOP S., KURŞUNOĞLU S., KAYA M.  
SEPARATION SCIENCE AND TECHNOLOGY, vol.56, no.14, pp.2475-2484, 2021 (SCI-Expanded)
- XII. **Recovery of zinc and lead from Yahyali non-sulphide flotation tailing by sequential acidic and sodium hydroxide leaching in the presence of potassium sodium tartrate**  
KURŞUNOĞLU S., TOP S., KAYA M.  
TRANSACTIONS OF NONFERROUS METALS SOCIETY OF CHINA, vol.30, no.12, pp.3367-3378, 2020 (SCI-Expanded)
- XIII. **Critical review on secondary zinc resources and their recycling technologies**  
KAYA M., Hussaini S., KURŞUNOĞLU S.  
HYDROMETALLURGY, vol.195, 2020 (SCI-Expanded)
- XIV. **Dissolution of lateritic nickel ore using ascorbic acid as synergistic reagent in sulphuric acid solution**  
KURŞUNOĞLU S., Ichlas Z. T., KAYA M.  
TRANSACTIONS OF NONFERROUS METALS SOCIETY OF CHINA, vol.28, no.8, pp.1652-1659, 2018 (SCI-Expanded)
- XV. **Current WEEE recycling solutions**  
KAYA M.  
WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT RECYCLING: AQUEOUS RECOVERY METHODS, pp.33-93, 2018 (SCI-Expanded)
- XVI. **Leaching method selection for Caldag lateritic nickel ore by the analytic hierarchy process (AHP)**  
KURŞUNOĞLU S., Ichlas Z. T., KAYA M.  
HYDROMETALLURGY, vol.171, pp.179-184, 2017 (SCI-Expanded)
- XVII. **Solvent extraction process for the recovery of nickel and cobalt from Caldag laterite leach solution: The first bench scale study**  
KURŞUNOĞLU S., Ichlas Z. T., KAYA M.  
HYDROMETALLURGY, vol.169, pp.135-141, 2017 (SCI-Expanded)
- XVIII. **Magnesite concentration technology and caustic - calcined product from Turkish magnesite middlings by calcination and magnetic separation**  
Bentli I., Erdogan N., Elmas N., KAYA M.  
SEPARATION SCIENCE AND TECHNOLOGY, vol.52, no.6, pp.1129-1142, 2017 (SCI-Expanded)
- XIX. **Recovery of metals and nonmetals from electronic waste by physical and chemical recycling processes**  
Kaya M.  
WASTE MANAGEMENT, vol.57, pp.64-90, 2016 (SCI-Expanded)
- XX. **Atmospheric pressure acid leaching of Caldag lateritic nickel ore**  
KURŞUNOĞLU S., KAYA M.  
INTERNATIONAL JOURNAL OF MINERAL PROCESSING, vol.150, pp.1-8, 2016 (SCI-Expanded)
- XXI. **Dissolution behavior of Caldag lateritic nickel ore subjected to a sequential organic acid leaching method**  
KURŞUNOĞLU S., KAYA M.  
INTERNATIONAL JOURNAL OF MINERALS METALLURGY AND MATERIALS, vol.22, no.11, pp.1131-1140, 2015 (SCI-Expanded)
- XXII. **DISSOLUTION AND PRECIPITATION OF ZINC AND MANGANESE OBTAINED FROM SPENT ZINC-**

## **CARBON AND ALKALINE BATTERY POWDER**

KURŞUNOĞLU S., KAYA M.

PHYSICOCHEMICAL PROBLEMS OF MINERAL PROCESSING, vol.50, no.1, pp.41-55, 2014 (SCI-Expanded)

### **XXIII. Recovery of Manganese from Spent Batteries Using Guar Meal as a Reducing Agent in a Sulfuric Acid Medium**

KURŞUNOĞLU S., KAYA M.

INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH, vol.52, no.50, pp.18076-18084, 2013 (SCI-Expanded)

### **XXIV. Recovery of Manganese from Spent Batteries Using Activated Carbon Powder as Reductant in Sulfuric Acid Solution**

KURŞUNOĞLU S., KAYA M.

ASIAN JOURNAL OF CHEMISTRY, vol.25, no.4, pp.1975-1980, 2013 (SCI-Expanded)

## **Articles Published in Other Journals**

- I. **Leaching of a complex Pb-Zn ore in sulfuric acid solution**  
Ozsarac S., Kursunoglu S., Top S., Altiner M., Hussaini S., Gokcen H. S., Kaya M.  
Niğde Ömer Halisdemir Üniversitesi Mühendislik Bilimleri Dergisi, vol.13, no.4, pp.1485-1491, 2024 (Peer-Reviewed Journal)
- II. **State-of-the-art lithium-ion battery recycling technologies**  
Kaya M.  
Circular Economy, vol.1, no.2, pp.1-27, 2022 (Peer-Reviewed Journal)
- III. **EXTRACTION OF LANTHANUM AND CERIUM FROM A BASTNASITE ORE BY DIRECT ACIDIC LEACHING**  
Kurşunoğlu S., Top S., Hussaini S., Gökçen H. S., Altiner M., Öz Saraç Ş., Kaya M.  
Bilimsel Madencilik Dergisi, vol.59, no.2, pp.85-92, 2020 (Scopus)
- IV. **NİKEL LATERİTLERİN HİDROMETALURJİK İŞLEMİ-NİKEL VE KOBALT AYIRIM VE SAFLAŞTIRMASI İÇİN SOLVENT EKSTRAKSİYON KULLANIMI VE NİKEL KOBALT PROJELERİNE KISA BİR BAKIŞ**  
KURŞUNOĞLU S., KAYA M.  
Bilimsel Madencilik Dergisi, pp.131-144, 2019 (Scopus)
- V. **Towards sustainable, secure and safe energy:A future for thorium power**  
KAYA M.  
Resour Environ Econ., vol.1, no.2, pp.1-7, 2019 (Peer-Reviewed Journal)
- VI. **Türkiye’de Gelecek Vaat Eden Sektörler**  
KAYA M.  
Kentsel Dönüşüm Dergisi, no.15, 2017 (Non Peer-Reviewed Journal)
- VII. **Recovery of Metals from Electronic waste by Physical and Chemical Recycling Processes**  
KAYA M.  
International Journal of Chemical, Molecular, Nuclear, Materials and Metallurgical Engineering, vol.10, no.2, pp.232-243, 2016 (Peer-Reviewed Journal)
- VIII. **Nobel Ödülü Gerçeklerinin Analizi**  
KAYA M.  
Tisk İŞVEREN DERGİSİ, vol.53, no.6, pp.102-104, 2015 (Non Peer-Reviewed Journal)
- IX. **Beyin Göçü**  
KAYA M.  
Üniversite ve Toplum Dergisi, vol.3, no.3, pp.6, 2003 (Non Peer-Reviewed Journal)
- X. **Beyin Göçü/Erozyonu**  
KAYA M.  
İş Güç Endüstri ilişkileri ve İnsan Kaynakları Dergisi, vol.5, no.13, pp.13, 2003 (Peer-Reviewed Journal)
- XI. **Froth washing technology in mechanical flotation machines**  
KAYA M., Andre L.  
INDUSTRIE MINERALE (MINES ET CARRIERES), vol.94, pp.90-92, 1992 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **Recovery of Lithium from Secondary Sources: Recycling Technologies of Spent Lithium Ion Batteries**  
Kaya M.  
Crc Press-Taylor & Francis Group, Florida, 2024
- II. **Industrial lithium-ion battery recycling**  
Kaya M.  
in: Recovery of lithium from secondary resorces: Recycling technologies of spent lithium-ion batteries, Muammer Kaya, Editor, Crc Press-Taylor & Francis Group, Florida, pp.204-253, 2024
- III. **Organic acid leaching and bioleaching of LIBs**  
Kaya M.  
in: Recovery of lithium from secondary resources: Recycling technologies of spent lithium-ion batteries, Muammer kaya, Editor, Crc Press-Taylor & Francis Group, Florida, pp.171-201, 2024
- IV. **Lithium-ion battery recycling technologies**  
Kaya M.  
in: Recovery of lithium-ion batteries: recycling technologies of spent lithium-ion batteries, Muammer Kaya, Editor, Crc Press-Taylor & Francis Group, Florida, pp.68-116, 2024
- V. **Lithium-ion batteries and their market**  
Kaya M.  
in: Recovery of Lithium from Secondary Resources: Recycling Technologies of Spent Lithium-ion Batteries, Muammer Kaya, Editor, Crc Press-Taylor & Francis Group, Florida, pp.16-50, 2024
- VI. **Lithium-ion batteries structure, assembly, and Functioning**  
Kaya M.  
in: Recovery of Lithium from Secondary Resources: Recycling Technolohies of Spent lithium-ion Batteries, Muammer Kaya, Editor, Crc Press-Taylor & Francis Group, Florida, pp.51-66, 2024
- VII. **Lithium-ion Batteries**  
Kaya M.  
in: İkincil Kaynaklardan Lityum Kazanımı: Kullanılmış Lityum İyon Pillerin Geri Kazanım Teknolojileri, Muammer Kaya, Editor, Crc Press-Taylor & Francis Group, Florida, pp.1-15, 2024
- VIII. **Solution purification**  
Kaya M.  
in: Recovery of lithium from secondary resources: Recycling technologies of spent lithium-ion batteries, Muammer Kaya, Editor, Crc Press-Taylor & Francis Group, Florida, pp.254-274, 2024
- IX. **Hydrometallurgical recycling of LIBs**  
Kaya M.  
in: Recovery of lithium from secondary resources: Recycling technologies of spent lithium-ion batteries, Muammer kaya, Editor, Crc Press-Taylor & Francis Group, Florida, pp.119-169, 2024
- X. **Waste Recycling in Maintaining a Circular Economy (Chapter 22)**  
Kaya M.  
in: Electronic Waste Management: Policies, Processes, Technologies, and Impact, Sunil Kumar and Vineet Kumar, Editor, John Wiley & Sons, West Sussex, UK , London, pp.200-220, 2024
- XI. **Hydrometallurgical Processing of Electronic Waste (Chapter 18)**  
Kaya M.  
in: Electronic Waste Management: Policies, Processes, Technologies, and Impact, Sunil Kumar and Vineet Kumar, Editor, John Wiley & Sons, West Sussex, UK , London, pp.150-180, 2024
- XII. **250 years in Engineering and Architecture in Turkey, ITU**  
Kaya M.  
in: TÜRKİYE'DE MÜHENDİSLİK VE MİMARLIĞIN 250 YILI SEMPOZYUM KİTABI, İTÜ, Eminalp Malkoç, Editor, İTÜ, İstanbul, pp.988-1007, 2024
- XIII. **Recycling Technologies for Secondary Zn-Pb Resources (The Minerals, Metals & Materials Series)**

Kaya M. (Editor)

Springer, London/Berlin , New York, 2023

- XIV. **Coal**  
Kaya M.  
in: Kömür, Prof. Dr. H. Dal and Prof. Dr.A. Kıvrak, Editor, Anadolu Üniversitesi Açık Öğretim Fakültesi, Eskişehir, pp.1-30, 2023
- XV. **Galvanizing Residue and Electrical Arc Furnace (EAF) Dust**  
Kaya M.  
in: Recycling Technologies for Secondary Zn-Pb Resources, Muammer Kaya, Editor, Springer, London/Berlin , New York, pp.71-150, 2023
- XVI. **Impurity Purification Before Electrowinning**  
Kaya M.  
in: Recycling Technologies for Secondary Zn-Pb Resources, Muammer Kaya, Editor, Springer, London/Berlin , New York, pp.365-400, 2023
- XVII. **Assessment of Secondary Zinc and Lead Resources**  
Kaya M.  
in: Recycling Technologies for Secondary Zn-Pb Resources, Muammer Kaya, Editor, Springer, London/Berlin , New York, pp.31-50, 2023
- XVIII. **Global Lead and Zinc Resources, Production and Secondary Industry**  
Kaya M.  
in: Recycling Technologies for Secondary Zn-Pb Resources, Muammer Kaya, Editor, Springer, London/Berlin , New York, pp.1-30, 2023
- XIX. **Leaching of H<sub>2</sub>SO<sub>4</sub>, Citric Acid, and Malic Acid Leached Pb and Ag Residues (Electrohydrometallurgical Process)**  
Kaya M.  
in: Recycling Technologies for Secondary Zn-Pb Resources, Muammer Kaya, Editor, Springer, London/Berlin , New York, pp.291-348, 2023
- XX. **H<sub>2</sub>SO<sub>4</sub> Leaching of Zn Secondaries**  
Kaya M.  
in: Recycling Technologies for Secondary Zn-Pb Resources, Muammer Kaya, Editor, Springer, London/Berlin , New York, pp.151-204, 2023
- XXI. **Printed Circuit Boards from a Recycling Point of View**  
Kaya M.  
in: Horizons in Computer Science Research, Thomas S. Clary, Editor, NOVA Science Publishers Inc. , New York, pp.89-133, 2022
- XXII. **Industrial Applications of Circular Economy for E-Waste Recycling**  
Kaya M.  
in: Horizons in Earth Science Research Vol. 22, Benjamin Veress, Jozsi Szigethy, Editor, NOVA Science Publishers Inc. , New York, pp.118-184, 2021
- XXIII. **Urban Mining of Rare Earth Elements from E-Waste (Elektronik Atıklardan Nadir Toprak Elementlerinin Şehir Madenciliği)**  
Kaya M.  
in: Horizons in Earth Science Research Vol. 22, Benjamin Veress, Jozsi Szigethy, Editor, NOVA Science Publishers Inc. , New York, pp.34-117, 2021
- XXIV. **Recycling of Polymer and Nonmetallic Feaction (NmF) of E-Waste**  
Kaya M.  
in: Horizons in Earth Science Research Vol. 22, Benjamin Veress, Jozsi Szigethy, Editor, NOVA Science Publishers Inc. , New York, pp.185-236, 2021
- XXV. **Electronic Waste and Printed Circuit Board Recycling Technologies**  
KAYA M.  
Springer, Cham, 2019

- XXVI. **Current WEEE recycling solutions**  
KAYA M.  
in: Waste Electric and Electronic Equipment Recycling - Aqueous Recovery methods, Francesco Veqlio, Ionela Birloage, Editor, Elsevier Inc.-Woodhead Publishing, pp.33-93, 2018
- XXVII. **Waste Printed Circuit Board (WPCB) Recovery Technology: Disassembly and Desoldering Approach**  
KAYA M.  
in: Reference Module in Materials Science and Materials Engineering, S. Hashmi, I.A. Choudhury et al., Editor, Elsevier Inc., pp.1-19, 2018
- XXVIII. **Chapter: 43 Recovery of metals and nonmetals from waste PCBs by physical recycling technology**  
KAYA M.  
in: Energy Technology 2017 Carbon Dioxide management and Other Technologies, L. Zhang, J.W. Drelich, N.R. Neelameggham, N. Haque, Z. Sun, T. Wang, J.A. Howarter, S. Ikhmayies, M.W. Kennedy, Editor, Springer, Cham, pp.433-451, 2017
- XXIX. **Ders Soma 301**  
KAYA M.  
Researchgate.net (e-book), Eskişehir, 2015
- XXX. **Türkiye de Araştırma Geliştirme Ne Durumdayız Ne Yapmalıyız**  
KAYA M.  
TİSK, Ankara, 2007
- XXXI. **The Effects of Froth on Flotation Kinetics- a mass Transfer Approach, In Frothing in Flotation**  
Andre L., KAYA M., H W S.  
in: Frothing in Flotation, J.S. Laskowski, Editor, Gordon and Breach Science Pub., pp.77-99, 1989

## Refereed Congress / Symposium Publications in Proceedings

- I. **Sustainable Production in a Circular Economy**  
Kaya M.  
EuroScience Open Forum (ESOF) - 2024, Katowice, Poland, 12 - 15 June 2024
- II. **NdFeB permanent Magnet Recycling Technologies**  
Kaya M.  
EuroScience Open Forum (ESOF) - 2024, Katowice, Poland, 12 - 15 June 2024
- III. **Lityum iyon pil geri dönüşümünde farklı ön-işlem metodlarının karşılaştırılması**  
Kaya M., Kar U., Suponik T.  
VI Mineral Engineering Conference, MEC 2023, Gliwice, Poland, 14 - 16 June 2023, pp.1-10
- IV. **Türkiye ve Dünya'da Maden Mühendisliği Eğitimi**  
Kaya M.  
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## Supported Projects

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Kaya M., H2020 Project, Integrated Eco-technology for a Selective Recovery of Base and Precious Metals (Au, Ag) in Cu and Pb Mining By-products, 2018 - 2022

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Resources and Environmental Economics, First Editor, 2018 - Continues

## Scientific Refereeing

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Publication: 126

Citation (WoS): 599

Citation (Scopus): 661

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## Congress and Symposium Activities

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ERASMUS PERSONEL HAREKETLİLİK, Invited Speaker, Gliwice, Poland, 2024

EuroScience Open Forum (ESOF-2024), Invited Speaker, Katowice, Poland, 2024

## Awards

Kaya M., Top 2% in Mining and Metallurgy, Stanford University & Elsevier, September 2024

Kaya M., Lifetime world ranking in recycling, ScholarGPS, August 2024

Kaya M., Best paper award in Circular Economy Journal in 2024, Circular Economy Journal Of Tsinghua University, May 2024

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## Non Academic Experience

Esk. Osmangazi Üniversitesi

Esk. Osmangazi Üniversitesi

Esk. Osmangazi Üniversitesi

McGill University