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Kişisel Bilgiler

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Eğitim Bilgileri

Doktora, University of Minnesota, School of Engineering, Department of Civil and Mineral Engineering, Amerika Birleşik Devletleri 1982 - 1984
Yüksek Lisans, University of Minnesota, School of Engineering, Department of Civil and Mineral Engineering, Amerika Birleşik Devletleri 1978 - 1982
Lisans, İstanbul Teknik Üniversitesi, Maden, Maden Mühendisliği, Türkiye 1972 - 1977

Yabancı Diller

İngilizce, C1 İleri

Yaptığı Tezler

Doktora, The Effect of Clay Minerals on the Selective Flocculation of Iron Ores, University Of Minnesota, Mineral Engineering, 1984
Yüksek Lisans, Determination of applicability of a newly designed hydrocyclone for on-stream particle size analysis, University Of Minnesota, Mineral Engineering, 1982

Araştırma Alanları

Maden Mühendisliği ve Teknolojisi

Akademik Unvanlar / Görevler

Prof.Dr., Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Maden Mühendisliği Bölümü, 2004 - Devam Ediyor
Doç.Dr., Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Maden Mühendisliği Bölümü, 1989 - 2004
Yrd.Doç.Dr., Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Maden Mühendisliği Bölümü, 1986 - 1989

Akademik İdari Deneyim

Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Maden Mühendisliği Bölümü, 2009 - 2015
Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Maden Mühendisliği Bölümü, 2003 - 2009
Bölüm Başkan Yardımcısı, Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Maden Mühendisliği Bölümü, 1991 - 1996

Verdiği Dersler

Tailings and Effluent Management, Lisans, 2018 - 2019
Chemistry of Mineral Water Systems, Yüksek Lisans, 2019 - 2020
Mineral Prcocessing II, Lisans, 2018 - 2019
Chemical Mining, Yüksek Lisans, 2016 - 2017

Yönetilen Tezler

AROL A. İ., Production of precipitated calcium carbonate from marble waste by calcination-hydration-carbonation, Yüksek Lisans, H.MELİS(Öğrenci), 2022
AROL A. İ., Determination of agglomeration characteristics of Oltu-stone (jet stone) wastes, Doktora, M.RAHEEL(Öğrenci), 2022
AROL A. İ., Beypazarı trona madeninde üretim ünitelerinin olgunlaşma süresini etkileyen operasyon faktörleri., Yüksek Lisans, T.Beşir(Öğrenci), 2019
AROL A. İ., Investigation of factors affecting coke strength after reaction (CSR) and developing a statistical model for CSR prediction, Yüksek Lisans, B.ÜNSAL(Öğrenci), 2018
AROL A. İ., Production of precipitated calcium carbonate from marble wastes, Yüksek Lisans, N.SEZER(Öğrenci), 2013
AROL A. İ., Effect of carbonate alkalinity on the flocculation behavior of hematite, Yüksek Lisans, A.MOLAEİ(Öğrenci), 2012
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AROL A. İ., Use of waste pyrite from mineral processing plants in soil remediation, Doktora, G.AYDIN(Öğrenci), 2011
AROL A. İ., Computer modeling of the initial cavern for Beypazarı trona ore on the basis of leaching rates,insoluble contents and thickness of trona layer, Yüksek Lisans, İ.TUNÇAY(Öğrenci), 2008
AROL A. İ., Use of borates as an activating agent for drilling mud bentonites, Doktora, B.TOKA(Öğrenci), 2008
AROL A. İ., Behaviour of Bentonite suspensions in non-aqueous media, Yüksek Lisans, T.USKARCI(Öğrenci), 2006
AROL A. İ., Hydrometallurgical extraction of nickel and cobalt from Çaldağ lateritic ore, Yüksek Lisans, V.ÖZDEMİR(Öğrenci), 2006
AROL A. İ., Heat treatment of iron ore agglomerates with microwave energy, Yüksek Lisans, Ç.ÇIRPAR(Öğrenci), 2005
AROL A. İ., Alkalinitenin kuvars flotasyonuna olan etkisi, Yüksek Lisans, A.Halime(Öğrenci), 2003
AROL A. İ., Effect of alkalinity on flotation behavior of quartz, Yüksek Lisans, H.ASLI(Öğrenci), 2003
AROL A. İ., Effect of ultrasonic treatment on selective flocculation of chromite, Yüksek Lisans, U.BARIŞ(Öğrenci), 2002
AROL A. İ., Investigation of separation of dark colored minerals from feldspar by selective flocculation, Yüksek Lisans, İ.DOĞU(Öğrenci), 2002
AROL A. İ., Usability of borax tailings in building bricks as an additive, Yüksek Lisans, T.USLU(Öğrenci), 1996
AROL A. İ., Gridability of mixtures of pure minerals, Yüksek Lisans, C.Turgut(Öğrenci), 1996
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AROL A. İ., Use of activated carbons produced from indigenous raw materials in gold metallurgy as an alternative to coconut shell carbons, Doktora, M.Yalçın(Öğrenci), 1996
AROL A. İ., Effect of activaiton degree on the pore size distribution and mechanical strength of activated carbons apricot stone origin, Yüksek Lisans, M.Fatih(Öğrenci), 1996
AROL A. İ., Enhancement possibilities of recovery of very fine magnetite particles in magnetic separation, Yüksek Lisans, A.Aydoğan(Öğrenci), 1994
AROL A. İ., Selective flocculation of chromite, Yüksek Lisans, F.BOLANDAKHTARI(Öğrenci), 1993

AROL A. İ., Concentration of very fine particles by centrifuge, Yüksek Lisans, M.JAZDAREHEE(Öğrenci), 1993
AROL A. İ., Grinding characteristics of Küre copper ore, Yüksek Lisans, B.FİDAN(Öğrenci), 1990
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AROL A. İ., Removal of antimony and arsenic from sulphide concentrates by sodium sulphide leaching, Yüksek Lisans, M.YALÇIN(Öğrenci), 1989

Tasarladığı Dersler

Arol A. İ., Tailings and Effluent Management, Lisans, 1994 - 1995
Arol A. İ., Chemistry of Mineral Water Systems, Yüksek Lisans, 1993 - 1994

SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

I. **Conversion of cleaned Oltu-stone wastes (a semi-precious stone) into a valuable product using binderless agglomeration**
Bawani M. R., AROL A. İ., TOZSİN G., TORUN A.
Physicochemical Problems of Mineral Processing, cilt.59, sa.5, 2023 (SCI-Expanded)

II. **Effects of abandoned coal mine on the water quality**
TOZSİN G., AROL A. İ., Duzgun S., Soydan H., TORUN A.
INTERNATIONAL JOURNAL OF COAL PREPARATION AND UTILIZATION, cilt.42, sa.11, ss.3202-3212, 2022 (SCI-Expanded)

III. **Forming superhydrophobic surfaces for mineral separation at water pulsating jigs**
CAMALAN M., AROL A. İ.
Colloids and Surfaces A: Physicochemical and Engineering Aspects, cilt.651, 2022 (SCI-Expanded)

IV. **Preliminary assessment of spray coating, solution-immersion and dip coating to render minerals superhydrophobic**
Camalan M., İhsan Arol A. İ.
Minerals Engineering, cilt.176, 2022 (SCI-Expanded)

V. **Changes in the chemical composition of an acidic soil treated with marble quarry and marble cutting wastes**
TOZSİN G., ÖZTAŞ T., AROL A. İ., KALKAN E.
CHEMOSPHERE, cilt.138, ss.664-667, 2015 (SCI-Expanded)

VI. **Pyritic Tailings as a Source of Plant Micronutrients in Calcareous Soils**
TOZSİN G., AROL A. İ.
COMMUNICATIONS IN SOIL SCIENCE AND PLANT ANALYSIS, cilt.46, sa.12, ss.1473-1481, 2015 (SCI-Expanded)

VII. **Use of waste pyrite as an alternative to gypsum for alkaline soil amelioration**
TOZSİN G., AROL A. İ., ÇAYCI G.
INTERNATIONAL JOURNAL OF MINING RECLAMATION AND ENVIRONMENT, cilt.29, sa.3, ss.169-177, 2015 (SCI-Expanded)

VIII. **The effects of marble wastes on soil properties and hazelnut yield**
TOZSİN G., ÖZTAŞ T., AROL A. İ., KALKAN E., Duyar O.
JOURNAL OF CLEANER PRODUCTION, cilt.81, ss.146-149, 2014 (SCI-Expanded)

IX. **Using marble wastes as a soil amendment for acidic soil neutralization**
TOZSİN G., AROL A. İ., ÖZTAŞ T., Kalkan E.
JOURNAL OF ENVIRONMENTAL MANAGEMENT, cilt.133, ss.374-377, 2014 (SCI-Expanded)

X. **EVALUATION OF PYRITIC TAILINGS FROM A COPPER CONCENTRATION PLANT FOR CALCAREOUS SODIC SOIL RECLAMATION**
TOZSİN G., AROL A. İ., ÇAYCI G.
PHYSICOCHEMICAL PROBLEMS OF MINERAL PROCESSING, cilt.50, sa.2, ss.693-704, 2014 (SCI-Expanded)

XI. **An investigation of the relationship between compressive strength and dust generation potential of magnetite pellets**
SİVRİKAYA O., AROL A. İ.
INTERNATIONAL JOURNAL OF MINERAL PROCESSING, cilt.123, ss.158-164, 2013 (SCI-Expanded)

XII. **The Effect of Calcined Colemanite Addition on the Mechanical Strength of Magnetite Pellets Produced with Organic Binders**
SİVRİKAYA O., AROL A. İ., Eisele T., Kawatra S. K.
MINERAL PROCESSING AND EXTRACTIVE METALLURGY REVIEW, cilt.34, sa.4, ss.210-222, 2013 (SCI-Expanded)

XIII. **Method to improve preheated and fired strengths of haematite pellets using boron compounds with organic binders**
SİVRİKAYA O., AROL A. İ.
IRONMAKING & STEELMAKING, cilt.40, sa.1, ss.1-8, 2013 (SCI-Expanded)

XIV. **The bonding/strengthening mechanism of colemanite added organic binders in iron ore pelletization**
SİVRİKAYA O., AROL A. İ.
INTERNATIONAL JOURNAL OF MINERAL PROCESSING, cilt.110, ss.90-100, 2012 (SCI-Expanded)

XV. **EVALUATION OF LOW GRADE IRON ORE DEPOSIT IN ERZINCAN-TURKEY FOR IRON ORE PELLET CONCENTRATE PRODUCTION**
SİVRİKAYA O., AROL A. İ.
PHYSICOCHEMICAL PROBLEMS OF MINERAL PROCESSING, cilt.48, sa.2, ss.475-484, 2012 (SCI-Expanded)

XVI. **Pelletization of magnetite ore with colemanite added organic binders**
Sivrikaya O., AROL A. İ.
POWDER TECHNOLOGY, cilt.210, sa.1, ss.23-28, 2011 (SCI-Expanded)

XVII. **Effect of carbonate alkalinity on flotation behavior of quartz**
Sayilgan A., Arol A.
INTERNATIONAL JOURNAL OF MINERAL PROCESSING, cilt.74, ss.233-238, 2004 (SCI-Expanded)

XVIII. **Behaviour of oversize particles in iron ore balling**
Basdag A., Arol A.
CIM BULLETIN, cilt.97, sa.1079, ss.69-71, 2004 (SCI-Expanded)

XIX. **Separation of dark-colored minerals from feldspar by selective flocculation using starch**
Dogu I., Arol A.
POWDER TECHNOLOGY, cilt.139, sa.3, ss.258-263, 2004 (SCI-Expanded)

XX. **Recovery enhancement of magnetite fines in magnetic separation**
Arol A., Aydogan A.
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XXI. **Use of boron waste as an additive in red bricks**
Uslu T., Arol A.
WASTE MANAGEMENT, cilt.24, sa.2, ss.217-220, 2004 (SCI-Expanded)

XXII. **Effect of microwave heating on magnetic separation of pyrite**
Uslu T., Atalay U., Arol A.
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XXIII. **Effect of sodium silicate on flocculation of hematite with starch in the presence of calcium**
Arol A., Iwasaki I.
SEPARATION SCIENCE AND TECHNOLOGY, cilt.38, sa.3, ss.647-659, 2003 (SCI-Expanded)

XXIV. **Coating of iron oxide pellets for direct reduction**
Basdag A., Arol A.
SCANDINAVIAN JOURNAL OF METALLURGY, cilt.31, sa.3, ss.229-233, 2002 (SCI-Expanded)

XXV. **Gold cyanide adsorption characteristics of activated carbon of non-coconut shell origin**
Yalcin M., Arol A.
HYDROMETALLURGY, cilt.63, sa.2, ss.201-206, 2002 (SCI-Expanded)

Diğer Dergilerde Yayınlanan Makaleler

I. **Use of boron compounds as binders in iron ore pelletization**
SİVRİKAYA O., AROL A. İ.
Open Mineral Processing Journal, cilt.3, sa.1, ss.25-35, 2010 (Hakemli Dergi)

Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar

I. **Washability and Thermal Properties of Oltutaşı Wastes**
Bawani M. R., AROL A. İ., TOZSİN G., Akbulak B., Torun A.
IMPC Eurasia Conference, 31 Ekim - 02 Kasım 2019

II. **SCALE-DOWN TUMBLER TESTS FOR DETERMINATION OF ABRASION RESISTANCE OF IRON ORE PELLETS**
SİVRİKAYA O., AROL A. İ.
XVII Balkan Mineral Processing Congress, 23 - 26 Mayıs 2019, cilt.1

III. **KÜÇÜLTÜLMÜŞ TAMBUR TESTİ İLE DEMİR CEVHERİ PELETLERİ AŞINMA DAYANIMI BELİRLENMESİ**
SİVRİKAYA O., AROL A. İ.
26th International Mining Congress and Exhibition (IMCET 2019), Ankara, Türkiye, 16 - 19 Nisan 2019, cilt.1, ss.884-896

IV. **Use of Solid Bowl Decanter as Mineral Concentration Device**
Bawani M. R., AROL A. İ.
16th International Mineral Processing Symposium, 23 - 25 Ekim 2018, cilt.1

V. **Thermal Investigation of Some Potential Binders for Iron Ore Pelletizing**
SİVRİKAYA O., AROL A. İ.
16th International Mineral Processing Symposium (IMPS 2018), Antalya, Türkiye, 23 - 25 Ekim 2018, cilt.1, ss.550-557

VI. **INVESTIGATION OF BENEFICIATION OF A MANGANESE ORE BY JIG**
SİVRİKAYA O., AROL A. İ.
Balkan Mineral Processing Congress, 1 - 03 Kasım 2017

VII. **Use of marble wastes in soil remediation**
TOZSİN G., AROL A. İ.
25th International Mining Congress and Exhibition of Turkey, 11 - 14 Nisan 2017

VIII. **Utilization of mineral wastes as alternative raw materials**
AROL A. İ.
Internatioanal Conference on Advance Materials and Processing, 28 Şubat - 02 Mart 2017

IX. **The Effect of Borates on the Aging of Drilling Mud Bentonites**
AROL A. İ., TOKA B.
4th International Mine & Mining Industries Congress & 6th Iranian Mining Engineering Conference, 6 - 08 Kasım 2016

X. **The Rheological and Filtrate Properties of Bentonites Activated with Borate and Treated with Polymers**
Toka B., AROL A. İ.
XVI Balkan Mineral Processing Congress, 17 - 19 Haziran 2015

XI. **Effect of Marble Waste on the ACid Generation Inhibition and Heavy Metal Mobility in Copper Sulphide Tailings**
TOZSİN G., AROL A. İ.
XVI Balkan Mineral Processing Congress, 17 - 19 Haziran 2015

XII. **IMPROVEMENT OF THE PROPERTIES OF IRON ORE PELLETS WITH BORON COMPOUNDS ADDITION**
SİVRİKAYA O., AROL A. İ.
89th Annual Meeting SME Minnesota Section 77th Annual University of Minnesota Mining Symposium, 14 - 15

Nisan 2015

XIII. **Maghemite - a source of heavy medium for coal washeries**
AROL A. İ., Ozbayoglu G., Anaç S., Bulut M.
25th International Mineral Processing Congress 2010, IMPC 2010, Brisbane, Avustralya, 6 - 10 Eylül 2010, cilt.1, ss.571-574

Bilirkişi Raporları

I. **Bilirkiş Raporu**
Arol A. İ., Karpuz C., Bilgin H. A.
Mahkeme, ss.4, Bolu, 2018

Desteklenen Projeler

AROL A. İ., BAWANI M. R., Yükseköğretim Kurumları Destekli Proje, Determination of Agglomeration characteristics of oltutaşı wastes, 2021 - 2022
AROL A. İ., Yükseköğretim Kurumları Destekli Proje, Konvansiyonel Titreşimli Dikdörtgen Eleklerden Üstün Performanslı Laboratuvar Ölçekli Bir Enine Daralan Eleğin Tasarlanması Ve Performansının Karşılaştırılmalı Olarak Değerlendirilmesi, 2012 - 2013

Bilimsel Kuruluşlardaki Üyelikler / Görevler

Society of Mining Engineers, Üye, 1980 - Devam Ediyor
TMMOB Maden Mühendisleri Odası, Üye, 1977 - Devam Ediyor

Bilimsel Hakemlikler

Bilimsel Madencilik Dergisi, Hakemli Bilimsel Dergi, Mayıs 2018
PHYSICOCHEMICAL PROBLEMS OF MINERAL PROCESSING, SCI Kapsamındaki Dergi, Nisan 2018
WASTE MANAGEMENT & RESEARCH, SCI Kapsamındaki Dergi, Mart 2018
Journal Of Cleaner Production, SCI Kapsamındaki Dergi, Mart 2018
PHYSICOCHEMICAL PROBLEMS OF MINERAL PROCESSING, SCI Kapsamındaki Dergi, Şubat 2018
PARTICULATE SCIENCE AND TECHNOLOGY, SCI Kapsamındaki Dergi, Ocak 2018

Etkinlik Organizasyonlarındaki Görevler

Arol A. İ., Atalay M. Ü., 16 International Mineral Processing Symposium, Bilimsel Kongre / Sempozyum Organizasyonu, Antalya, Türkiye, Ekim 2018

Metrikler

Yayın: 42
Atıf (WoS): 438
Atıf (Scopus): 426
H-İndeks (WoS): 12
H-İndeks (Scopus): 12

Kongre ve Sempozyum Katılımı Faaliyetleri

International Mineral Processing Conference Eurasia (IMPC 2019), Çalışma Grubu, Antalya, Türkiye, 2019
Davetli Konuşmacı, Karachi, Pakistan, 2017

Ödüller

Arol A. İ., Mehmet Kemal Dedeman Araştırma ve Geliştirme Proje Yarışması, Mehmet Kemal Dedeman , Mayıs 2009

Akademi Dışı Deneyim

Gulf Industrial Investment Company (GIIC), Bahreyn
Türkiye Demir Çelik İşletmeleri Genel Müdürlüğü
University of Minnesota
Hasan Çelebi Grup Başkanlığı