

## Assoc. Prof. DENİZ ALTUN

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: G-5943-2013

ScopusID: 57192924107

Yoksis Researcher ID: 170074

### Education Information

Doctorate, Hacettepe University, Fen Bilimleri, Maden Mühendisliği, Turkey 2011 - 2017

Postgraduate, Hacettepe University, Fen Bilimleri, Maden Mühendisliği, Turkey 2008 - 2011

Undergraduate, Hacettepe University, Mühendislik Fakültesi, Maden Mühendisliği, Turkey 2002 - 2007

### Foreign Languages

English, C1 Advanced

### Research Areas

Mining Engineering and Technology, Ore-Dressing, Grinding and Abrasion Materials Technology, Communion-Sizing-Classification, Process and Plant Design, Engineering and Technology

### Academic Titles / Tasks

Research Assistant, Hacettepe University, Mühendislik Fakültesi, Maden Mühendisliği Bölümü, 2009 - Continues

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

- I. **Assessment of different energy-based breakage distribution functions in population balance model of an industrial scale continuously operated wet stirred media mill**  
Altun O., Toprak A., Altun D., Bilgili E.  
MINERALS ENGINEERING, vol.218, 2024 (SCI-Expanded)
- II. **PBM of an industrial-scale vertical wet stirred media mill (HIGMill): Assessment of back-calculation and hybrid methods**  
Bilgili E., Toprak A., ALTUN D., ALTUN O.  
Powder Technology, vol.440, 2024 (SCI-Expanded)
- III. **Scale-up of Vertical Wet Stirred Media Mill (HIGmill) via Signature Plots, Stress Analyses and Energy**

## Equations

ALTUN O., Sert T., ALTUN D., Toprak A., Kwade A.

Minerals Engineering, vol.205, 2024 (SCI-Expanded)

- IV. **Element based ball mill and hydrocyclone modelling for a copper ore grinding circuit**  
Göktaş I., Altun O., Toprak N. A., Altun D.  
Minerals Engineering, vol.198, 2023 (SCI-Expanded)
- V. **Understanding HIGMill operation at copper regrind application; operating parameters, wear and mineral liberation**  
ALTUN O., Darılmaz Ö., Karahan E., Sert T., ALTUN D., Toprak A., Hür A.  
Minerals Engineering, vol.191, 2023 (SCI-Expanded)
- VI. **Estimation of mineral liberation distribution functions to be used in modelling of impact and attrition milling**  
Altun O., Altun D.  
Minerals Engineering, no.107236, pp.1-13, 2021 (SCI-Expanded)
- VII. **Predicting the grinding energy of vrm depending on material characterization**  
ALTUN D., Benzer H., Gerold C., Schmitz C.  
Minerals Engineering, vol.171, 2021 (SCI-Expanded)
- VIII. **Investigation of the effect of multiple impacts on clinker breakage using the impact bed breakage test**  
Altun D.  
ZKG INTERNATIONAL, no.5, pp.38-44, 2021 (SCI-Expanded)
- IX. **Developing a methodology to model and predict the grinding performance of the dry stirred mill**  
ALTUN D., ALTUN O., Zencirci S.  
MINERALS ENGINEERING, vol.139, 2019 (SCI-Expanded)
- X. **The use of impact bed breakage procedure in model fitting of dry stirred mill**  
ALTUN D., ALTUN O., Benzer H.  
PARTICULATE SCIENCE AND TECHNOLOGY, 2019 (SCI-Expanded)
- XI. **Operational parameters affecting the vertical roller mill performance**  
ALTUN D., Benzer H., Aydoğan N., Gerold C.  
MINERALS ENGINEERING, vol.103, pp.67-71, 2017 (SCI-Expanded)
- XII. **Modelling of component behaviour around a cement grinding circuit**  
Altun D., Benzer A. H., Altun O.  
ZKG INTERNATIONAL, vol.70, no.10, pp.58-67, 2017 (SCI-Expanded)
- XIII. **Copper ore grinding in a mobile vertical roller mill pilot plant**  
ALTUN D., Gerold C., Benzer H., ALTUN O., Aydoğan N.  
INTERNATIONAL JOURNAL OF MINERAL PROCESSING, vol.136, pp.32-36, 2015 (SCI-Expanded)
- XIV. **Simulation assisted capacity improvement of cement grinding circuit: Case study cement plant**  
DÜNDAR H., Benzer H., AYDOĞAN N., ALTUN O., TOPRAK N. A., ÖZCAN Ö., EKŞİ D., Sargin A.  
MINERALS ENGINEERING, vol.24, pp.205-210, 2011 (SCI-Expanded)
- XV. **A new method for determination of fine particle breakage**  
Eksi D., BENZER A. H., SARGIN A., Genc O.  
MINERALS ENGINEERING, vol.24, pp.216-220, 2011 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Modelling of pilot scale vertical roller mill operated in overflow mode**  
ALTUN D., BENZER A. H.  
MINERAL PROCESSING AND EXTRACTIVE METALLURGY-TRANSACTIONS OF THE INSTITUTIONS OF MINING AND METALLURGY, vol.130, no.4, pp.332-340, 2021 (ESCI)
- II. **THE APPLICABILITY OF SIZE-DEPENDENT BREAKAGE MODEL IN COMPRESSED BED TEST**

Altun D., Benzer A. H.

Niğde Üniversitesi Mühendislik Bilimleri Dergisi, vol.9, no.1, pp.472-479, 2020 (Peer-Reviewed Journal)

III. **FARKLI KIRILMA TEST PROTOKOLLERİNİN KAMARALI BİLYALI DEĞİRMEN MODELLEMESİNDE KULLANIMI**

ALTUN D., ALTUN O.

Bilimsel Madencilik Dergisi, vol.58, pp.257-266, 2019 (Scopus)

**Refereed Congress / Symposium Publications in Proceedings**

- I. **ASSESSMENT OF MICROHYDRODYNAMIC AND POPULATION BALANCE MODELING OF WET STIRRED MEDIA MILLS**  
Bilgili E., ALTUN O., TOPRAK N. A., ALTUN D.  
IMCET 2023 28th International Mining Congress and Exhibition of Türkiye, Antalya, Turkey, 28 November 2023
- II. **SIMULATION OF PILOT SCALE JAW CRUSHER USING DEM**  
ALTUN D., ALTUN O., TOPRAK N. A., Tipici C. V., Akn Ö., Dağtarla Z., Savaş E.  
IMCET 2023 28th International Mining Congress and Exhibition of Türkiye, Antalya, Turkey, 28 November 2023
- III. **ENERGY OPTIMIZATION OF A GRINDING CIRCUIT AT A COPPER MINE BİR BAKIR MADENİNDE ÖĞÜTME DEVRESİNİN ENERJİ OPTİMİZASYONU**  
Sert T., ALTUN O., TOPRAK N. A., ALTUN D., Darılmaz Ö.  
27th International Mining Congress and Exhibition of Turkey, IMCET 2022, Antalya, Turkey, 22 - 25 March 2022, pp.324-334
- IV. **HIG MILL PERFORMANCE AT COPPER FLOTATION CIRCUIT REGRIND APPLICATION BAKIR FLOTASYON DEVRESİ REGRIND UYGULAMASINDA HIG DEĞİRMEN PERFORMANSI**  
ALTUN O., Darılmaz Ö., Hür A., Karahan C., Göller Z., Sert T., ALTUN D., TOPRAK N. A.  
27th International Mining Congress and Exhibition of Turkey, IMCET 2022, Antalya, Turkey, 22 - 25 March 2022, pp.409-416
- V. **SİNTERLİK DEMİR CEVHERİ KONSANTRESİNİN DRI PELET KEKİ ÜRETİMİNİNDE KULLANILABİLİRLİĞİNİN ARAŞTIRILMASI**  
BENZER A. H., ALTUN D., ÖZAL Ö., CEBECİ V.  
IMCET, Turkey, 16 - 19 April 2019
- VI. **Comparing Vertical Roller Mill Performance on Two Different Precious Metal Ores**  
ALTUN D., Little W., BENZER A. H., Mainza A., Becker M., Gerold C.  
Comminution 18, Cape-Town, South Africa, 16 - 19 April 2018
- VII. **Effects of Bed Dimensions on Fine Particle Breakage**  
ALTUN D., BENZER A. H., ALTUN O.  
Comminution 18, Cape-Town, South Africa, 16 - 19 April 2018
- VIII. **Performance Evaluation of Vertical Roller Mill in Cement Grinding: Case Study ESCH Cement Plant**  
ALTUN D., AYDOĞAN N. A., ALTUN O., BENZER A. H.  
15. EUROPEAN SYMPOSIUM ON COMMUNITION CLASSIFICATION, İzmir, Turkey, 11 - 14 September 2017
- IX. **Application of HPGR, VRM and dry classification in mineral processing**  
DÜNDAR H., BENZER A. H., AYDOĞAN N. A., ALTUN O., ALTUN D., TOPRAK N. A.  
International Congress on Mineral Comminution 2017, Peru, Lima, Peru, 11 - 13 May 2017
- X. **Operational Parameters Affecting the Vertical roller Mill Performance**  
ALTUN D., BENZER A. H., AYDOĞAN N. A., Gerold C.  
Comminution 16, 10 - 15 April 2016
- XI. **Optimization alternatives in cement grinding circuits**  
TOPRAK N. A., BENZER A. H., AYDOĞAN N. A., ALTUN O., DÜNDAR H., ÖZCAN Ö., ALTUN D.  
14th International Mineral Processing Symposium, 15 - 17 October 2014

## **Metrics**

Publication: 29

Citation (WoS): 79

Citation (Scopus): 118

H-Index (WoS): 4

H-Index (Scopus): 5

## **Non Academic Experience**

Hacettepe Üniversitesi