

## Prof. YAVUZ ALI TOPKAYA

### Personal Information

**Email:** topkaya@metu.edu.tr

**Web:** <https://avesis.metu.edu.tr/topkaya>

### Advising Theses

- TOPKAYA Y. A., Optimisation of organic phase pre-neutralisation stage in purification studies with solvent extraction for MHP (mixed hydroxide precipitate) produced from Grdes laterite ore and investigation of its effect on extraction, Postgraduate, E.KAYA(Student), 2021
- ALTUN N. E., TOPKAYA Y. A., Investigation of the pre-concentration possibility of scandium ores, Postgraduate, Y.ALTINSEL(Student), 2018
- GRBZ R., TOPKAYA Y. A., Solvent extraction of scandium from pregnant leach solution of nickel laterites, Postgraduate, E.FERİZOĐLU(Student), 2017
- TOPKAYA Y. A., EXTRACTION OF SCANDIUM FROM A LATERITIC NICKEL-COBALT ORE BY MEANS OF HYDROMETALLURGICAL TECHNIQUES, Doctorate, Ő.KAYA(Student), 2016
- TOPKAYA Y. A., Investigation of the production of silicon nitride from Turkish rice husks, Postgraduate, B.YİĐİT(Student), 2014
- TOPKAYA Y. A., Optimization of ferronickel production from Sivrihisar nickel laterite ore, Doctorate, S.POURNADERI(Student), 2014
- TOPKAYA Y. A., Extraction of nickel and cobalt from lateritic ores by nitric acid /, Postgraduate, O.SAKA(Student), 2014
- TOPKAYA Y. A., Comparative study of high pressure and atmospheric acid leaching for the extraction of nickel and cobalt from refractory nickel laterite ores, Postgraduate, K.KORKMAZ(Student), 2014
- TOPKAYA Y. A., Pressure leaching of Caldag lateritic nickel ore, Postgraduate, M.ALİ(Student), 2013
- TOPKAYA Y. A., Pressure leaching of Sivrihisar-Yunusemre nickel laterites, Postgraduate, B.SEĐEN(Student), 2011
- TOPKAYA Y. A., High pressure acid leaching of Turkish laterites, Postgraduate, Ő.KAYA(Student), 2011
- TOPKAYA Y. A., Hydrometallurgical processing of lateritic nickel ores, Postgraduate, C.HAKKI(Student), 2010
- TOPKAYA Y. A., Recovery of zinc and lead from INKUR leach residues by using hydrometallurgical techniques, Postgraduate, A.RŐEN(Student), 2007

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

- I. **Recovery of Iron from Turkish and Iranian Red Muds**  
ERAY S., KESKİNKILIĐ E., TOPKAYA Y. A., GEVECİ A.  
JOM, vol.74, no.2, pp.456-464, 2022 (SCI-Expanded)
- II. **REDUCTION BEHAVIOR OF IRON IN THE RED MUD**  
Eray S., Keskinilic E., Topkaya Y. A., Geveci A.  
JOURNAL OF MINING AND METALLURGY SECTION B-METALLURGY, vol.57, no.3, pp.431-437, 2021 (SCI-Expanded)
- III. **USE OF COLEMANITE IN FERRONICKEL SMELTING**  
KESKİNKILIĐ E., Pournaderi S., GEVECİ A., TOPKAYA Y. A.  
JOURNAL OF MINING AND METALLURGY SECTION B-METALLURGY, vol.55, no.1, pp.1-8, 2019 (SCI-Expanded)
- IV. **Solvent extraction behaviour of scandium from lateritic nickel-cobalt ores using different organic reagents**

Ferizoglu E., Kaya S., Topkaya Y. A.

PHYSICO-CHEMICAL PROBLEMS OF MINERAL PROCESSING, vol.54, no.2, pp.538-545, 2018 (SCI-Expanded)

- V. **Laboratory-scale smelting of limonitic laterite ore from Central Anatolia**  
Pournaderi S., KESKİNKILIÇ E., GEVECİ A., TOPKAYA Y. A.  
JOURNAL OF THE SOUTHERN AFRICAN INSTITUTE OF MINING AND METALLURGY, vol.117, no.7, pp.695-703, 2017 (SCI-Expanded)
- VI. **Volume combustion and mechanochemical syntheses of LaB<sub>6</sub>**  
Akgun B., Sevinc N., ÇAMURLU H. E., TOPKAYA Y. A.  
INTERNATIONAL JOURNAL OF MATERIALS & PRODUCT TECHNOLOGY, vol.55, no.4, pp.331-339, 2017 (SCI-Expanded)
- VII. **Investigation of Copper Losses to Synthetic Slag at Different Oxygen Partial Pressures in the Presence of Colemanite**  
RÜŞEN A., Derin B., GEVECİ A., TOPKAYA Y. A.  
JOM, vol.68, no.9, pp.2316-2322, 2016 (SCI-Expanded)
- VIII. **Effects of Some Additives on Copper Losses to Matte Smelting Slag**  
RÜŞEN A., GEVECİ A., TOPKAYA Y. A., Derin B.  
JOM, vol.68, no.9, pp.2323-2331, 2016 (SCI-Expanded)
- IX. **Pressure acid leaching of Caldag lateritic nickel ore: An alternative to heap leaching**  
Onal M. A. R., TOPKAYA Y. A.  
HYDROMETALLURGY, vol.142, pp.98-107, 2014 (SCI-Expanded)
- X. **Reducibility of nickeliferous limonitic laterite ore from Central Anatolia**  
Pournaderi S., KESKİNKILIÇ E., GEVECİ A., TOPKAYA Y. A.  
CANADIAN METALLURGICAL QUARTERLY, vol.53, no.1, pp.26-37, 2014 (SCI-Expanded)
- XI. **Mechanochemical and combustion synthesis of CeB<sub>6</sub>**  
Akgun B., SEVİNÇ N., ÇAMURLU H. E., Topkaya Y.  
INTERNATIONAL JOURNAL OF MATERIALS RESEARCH, vol.104, no.4, pp.403-407, 2013 (SCI-Expanded)
- XII. **Minimization of copper losses to slag in matte smelting by colemanite addition**  
Rusen A., GEVECİ A., TOPKAYA Y. A.  
SOLID STATE SCIENCES, vol.14, pp.1702-1704, 2012 (SCI-Expanded)
- XIII. **Calcination characteristics of laterite ores from the central region of Anatolia**  
KESKİNKILIÇ E., Pournaderi S., GEVECİ A., TOPKAYA Y. A.  
JOURNAL OF THE SOUTHERN AFRICAN INSTITUTE OF MINING AND METALLURGY, vol.112, no.10, pp.877-882, 2012 (SCI-Expanded)
- XIV. **Investigation of effect of colemanite addition on copper losses in matte smelting slag**  
Rusen A., GEVECİ A., TOPKAYA Y. A., Derin B.  
CANADIAN METALLURGICAL QUARTERLY, vol.51, no.2, pp.157-169, 2012 (SCI-Expanded)
- XV. **High pressure acid leaching of a refractory lateritic nickel ore**  
MUTLU KAYA S., TOPKAYA Y. A.  
MINERALS ENGINEERING, vol.24, no.11, pp.1188-1197, 2011 (SCI-Expanded)
- XVI. **Mechanochemical and volume combustion synthesis of ZrB<sub>2</sub>**  
Akgun B., ÇAMURLU H. E., Topkaya Y., SEVİNÇ N.  
INTERNATIONAL JOURNAL OF REFRACTORY METALS & HARD MATERIALS, vol.29, no.5, pp.601-607, 2011 (SCI-Expanded)
- XVII. **Hydrometallurgical processing of nontronite type lateritic nickel ores by MHP process**  
Kose C. H., TOPKAYA Y. A.  
MINERALS ENGINEERING, vol.24, no.5, pp.396-415, 2011 (SCI-Expanded)
- XVIII. **Catalytic effect of alkaline earth oxides on carbothermic formation of hexagonal boron nitride**  
ÇAMURLU H. E., Topkaya Y., SEVİNÇ N.  
CERAMICS INTERNATIONAL, vol.35, no.6, pp.2271-2275, 2009 (SCI-Expanded)
- XIX. **Extraction of nickel from lateritic ores at atmospheric pressure with agitation leaching**  
Buyukakinci E., TOPKAYA Y. A.

- HYDROMETALLURGY, vol.97, pp.33-38, 2009 (SCI-Expanded)
- XX. **Rare earth double sulfates from pre-concentrated bastnasite**  
Kul M., TOPKAYA Y. A., KARAKAYA İ.  
HYDROMETALLURGY, vol.93, pp.129-135, 2008 (SCI-Expanded)
- XXI. **Zinc and lead extraction from Cinkur leach residues by using hydrometallurgical method**  
Rusen A., Sunkar A. S., TOPKAYA Y. A.  
HYDROMETALLURGY, vol.93, pp.45-50, 2008 (SCI-Expanded)
- XXII. **Recovery of germanium and other valuable metals from zinc plant residues**  
Kul A., TOPKAYA Y. A.  
HYDROMETALLURGY, vol.92, pp.87-94, 2008 (SCI-Expanded)
- XXIII. **Formation of TiB<sub>2</sub> by volume combustion and mechanochemical process**  
Bilgi E., ÇAMURLU H. E., Akgun B., Topkaya Y., SEVİNÇ N.  
MATERIALS RESEARCH BULLETIN, vol.43, no.4, pp.873-881, 2008 (SCI-Expanded)
- XXIV. **Effect of calcium carbonate addition on carbothermic formation of hexagonal boron nitride**  
ÇAMURLU H. E., SEVİNÇ N., Topkaya Y.  
JOURNAL OF THE EUROPEAN CERAMIC SOCIETY, vol.28, no.3, pp.679-689, 2008 (SCI-Expanded)
- XXV. **Desulphurization characteristics of ladle furnace slags of a low sulphur steel**  
Keskinkilic E., Geveci A., Topkaya Y. A.  
CANADIAN METALLURGICAL QUARTERLY, vol.46, no.4, pp.391-396, 2007 (SCI-Expanded)
- XXVI. **Role of boron carbide in carbothermic formation of hexagonal boron nitride**  
Camurlu H. E., Sevinc N., Topkaya Y.  
JOURNAL OF MATERIALS SCIENCE, vol.41, no.15, pp.4921-4927, 2006 (SCI-Expanded)
- XXVII. **Slag treatment at Kardemir integrated iron and steel works**  
Topkaya Y., Sevinc N., Gunaydin A.  
INTERNATIONAL JOURNAL OF MINERAL PROCESSING, vol.74, pp.31-39, 2004 (SCI-Expanded)
- XXVIII. **Sulfuric acid leaching of Turkish chromite concentrate**  
Geveci A., Topkaya Y., Ayhan E.  
MINERALS ENGINEERING, vol.15, no.11, pp.885-888, 2002 (SCI-Expanded)
- XXIX. **Acid curing and baking of bastnaesite ore and concentrate**  
Topkaya Y., Akkurt S.  
RARE EARTHS '98, pp.530-536, 1999 (SCI-Expanded)
- XXX. **LEACHING BY FERRIC SULFATE OF RAW AND CONCENTRATED COPPER-ZINC COMPLEX SULFIDE ORES**  
BUTTINELLI D., LAVECCHIA R., POCHETTI F., GEVECI A., GURESIN N., TOPKAYA Y.  
INTERNATIONAL JOURNAL OF MINERAL PROCESSING, vol.36, pp.245-257, 1992 (SCI-Expanded)

## **Refereed Congress / Symposium Publications in Proceedings**

- I. **Smelting Studies for Recovery of Iron from Red Mud**  
KESKİNKILIÇ E., Pournaderi S., GEVECI A., TOPKAYA Y. A.  
10th International Symposium on High-Temperature Metallurgical Processing, San-Antonio, Northern Mariana Islands, 01 January 2019, pp.489-499
- II. **Solvent extraction of scandium from lateritic nickel- cobalt ores using different organic reagents**  
Ferizoglu E., Kaya S., Topkaya Y. A.  
Mineral Engineering Conference (MEC), Swieradow Zdroj, Poland, 25 - 28 September 2016, vol.8
- III. **A STUDY ON THE CHARACTERIZATION OF NICKEL LATERITES OF CENTRAL ANATOLIA**  
KESKİNKILIÇ E., Pournaderi S., GEVECI A., TOPKAYA Y. A.  
7th International Symposium on High-Temperature Metallurgical Processing held during TMS 145th Annual Meeting and Exhibition, Tennessee, United States Of America, 14 - 18 February 2016, pp.403-410
- IV. **PRODUCTION OF CRUDE FERRONICKEL FROM SIVRIHISAR LATERITE ORES OF TURKEY**

KESKİNKILIÇ E., Pournaderi S., GEVECİ A., TOPKAYA Y. A.

4th International Symposium on High-Temperature Metallurgical Processing held during the 142nd TMS Annual Meeting and Exhibition, San-Antonio, Northern Mariana Islands, 3 - 07 March 2013, pp.453-460

**V. STUDY OF CERTAIN PARAMETERS IN LABORATORY-SCALE SMELTING OF SIVRIHISAR LATERITE ORES OF TURKEY**

KESKİNKILIÇ E., Pournaderi S., GEVECİ A., TOPKAYA Y. A.

3rd International Symposium on High-Temperature Metallurgical Processing held during the held during the TMS 141st Annual Meeting & Exhibition, Florida, United States Of America, 11 - 15 March 2012, pp.491-498

**VI. CALCINATION BEHAVIOR OF SIVRIHISAR LATERITE ORES OF TURKEY**

KESKİNKILIÇ E., Pournaderi S., GEVECİ A., TOPKAYA Y. A.

2nd International Symposium on High-Temperature Metallurgical Processing held during the TMS 140th Annual Meeting & Exhibition, California, United States Of America, 27 February - 03 March 2011, pp.319-326

**VII. Production of rare earth ferrosilicide alloy**

TOPKAYA Y. A., GEVECİ A., Turgay O.

Sohn International Symposium on Advanced Processing of Metals and Materials, California, United States Of America, 27 - 31 August 2006, pp.371-383

**VIII. Desulfurization in the ladle furnace using industrial slags**

GEVECİ A., Keskinilic E., TOPKAYA Y. A.

Sohn International Symposium on Advanced Processing of Metals and Materials, California, United States Of America, 27 - 31 August 2006, pp.317-319

**IX. Production of boron nitride by carbothermic and mechanochemical methods, and nanotube formation**

Camurlu H., Aydogdu A., Topkaya Y., Sevinc N.

Conference of the NATO-Advanced-Study-Institute on Nanoengineered Nanofibrous Materials, Belek-Antalya, Turkey, 1 - 12 September 2003, vol.169, pp.115-120

**X. Recovery of rare earths from a bastnaesite preconcentrate**

Topkaya Y., Kul M., Karakaya I.

Symposium on Rare Earths and Actinides held during the 2000 TMS Annual Meeting, Tennessee, United States Of America, 12 - 16 March 2000, pp.11-16

**XI. Oxidative pressure leaching of Cayeli zinc sulphide concentrate**

Guresin N., Topkaya Y., Geveci A.

6th International Mineral Processing Symposium, KUSADASI, Turkey, 24 - 26 September 1996, pp.525-530

**XII. METALLURGICAL EXTRACTION OF RARE-EARTH ELEMENTS FROM BEYLIKAHIR COMPLEX ORE**  
TOPKAYA Y., AKKURT S., OZBAYOGLU G.

5th International Mineral Processing Symposium, CAPPADOCIA, Turkey, 6 - 08 September 1994, pp.283-288

## Supported Projects

TOPKAYA Y. A., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2014

TOPKAYA Y. A., Project Supported by Higher Education Institutions, Hidrometalurjik Tekniklerle Lateritik Bir Nikel-Kobalt Cevherinden Skandiyum Ekstraksiyonu, 2014 - 2014

TOPKAYA Y. A., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2014

TOPKAYA Y. A., KORKMAZ K., Project Supported by Higher Education Institutions, REFRAKTER LATERİTİK NİKEL CEVHERLERİNDEN NİKEL VE KOBALTIN EKTRASYONU, 2013 - 2013

TOPKAYA Y. A., SAKA O., Project Supported by Higher Education Institutions, NİKEL VE KOBALTIN LATERİTİK CEVHERLERDEN NİTRİK ASİT İLE EKSTRAKSİYONU, 2013 - 2013

TOPKAYA Y. A., POURNADERI S., Project Supported by Higher Education Institutions, PYROMETALLURGICAL NICKEL EXTRACTION FROM TURKISH OXIDE TYPE NICKEL ORES, 2013 - 2013

TOPKAYA Y. A., ALPAY B. Y., Project Supported by Higher Education Institutions, TÜRK PİRİNÇ KABUKLARINDAN SİLİSYUM NİTRÜR ÜRETİMİNİN ARAŞTIRILMASI, 2013 - 2013

TOPKAYA Y. A., ALPAY B. Y., Project Supported by Higher Education Institutions, TÜRK PİRİNÇ KABUKLARINDAN SİLİSYUM NİTRÜR ÜRETİMİNİN ARAŞTIRILMASI, 2013 - 2013

TOPKAYA Y. A., Project Supported by Higher Education Institutions, HİDROMETALURJİK TEKNİKLERLE LATERİTİK BİR NİKEL-KOBALT CEVHERİNDEN SKANDİYUM EKSTRAKSİYONU, 2013 - 2013

TOPKAYA Y. A., pournaderi s., Project Supported by Higher Education Institutions, Sivrihisar Nikel Laterit Cevherinden Ferronikel Üretiminin Optimizasyonu Ve Nikel Verimini Artırmak İçin Bor Bileşiklerinin Kullanımı, 2012 - 2013

TOPKAYA Y. A., Project Supported by Higher Education Institutions, Gümüşhane-Midi Sfelarit Konsantresinden Çinkonun Ekstraksiyonu Ve Kazanımının Optimizasyonu, 2012 - 2012

TOPKAYA Y. A., Project Supported by Higher Education Institutions, Eskişehir - Sivrihisar Lateritik Nikel Cevherlerinin Kolonda Ve Otoklavda Yüksek Basınç Altında Liç Edilmesi Ve Nikel Kobalt Hidroksit Eldesi., 2010 - 2010

TOPKAYA Y. A., Project Supported by Higher Education Institutions, Lateritik Nikel Cevherlerinin Basınç Altında Liç Edilmesi Ve Nikel-Kobalt Hidroksit Eldesi, 2009 - 2009

## Metrics

Publication: 42

Citation (WoS): 746

Citation (Scopus): 651

H-Index (WoS): 14

H-Index (Scopus): 13