# Hadi Abdollahi, Ph.D.

School of Mining Engineering

University of Tehran

Tel (Direct): +98 (21)82084567

email: h\_abdollahi@ut.ac.ir

Website:

**EDUCATION**

**Ph.D In Mining Engineering- Mineral Processing**University of Tehran 2008-2014
**M.Sc In Mining Engineering- Mineral Processing**University of Tehran 2003-2006
**B.Sc In Mining Engineering (Exploration)**Sahand University of Technology 1999-2003

**PUBLICATIONS**

|  |  |  |  |  |
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| **1508** | **23** | **89** | **25** | **2** |
| Citations | h-Index | Article | Conference | Book |

***Articles***

**1.** Unveiling the potential of Glutamicbacter nicotiana for enhanced bioleaching of nickel and valuable metals from low- and high-grade nickeline ores. boroumand Zohreh, Abdollahi Hadi, Mirmohammadi Mirsaleh, Najafi Asli Pashaki Shabnam, Ghorbani Yousef (2024)., Journal of Environmental Chemical Engineering, 12(2), 112141.

**2.** Sulfide Mineral Bioflotation Optimization and Prediction by Mixed Mesophilic Bacteria as a Green Alternative for Chemical Reagents. Shahbaznejad Morteza, Abdollahi Hadi, Gharabaghi Mahdi, Mirmohammadi Mirsaleh, Rezaei Ali, Saneie Roozbeh (2024)., Journal of Sustainable Metallurgy, 1(1).

**3.** Hydrothermal synthesis of Fe3O4 nanoparticles at different pHs and its effect on discoloration of methylene blue: Evaluation of alternatives by TOPSIS method. Rafie Seyed Faridedin, Sayahi Hani, Abdollahi Hadi, Abu-Zahra Nidal (2023)., Materials Today Communications, 37(107589).

**4.** Bioflotation and Bioleaching as an Alternative Method for Desulphurization and Ash Reduction in Tabas Coal. Shahbazi Mohamad Reza, Abdollahi Hadi, Shafahi Tonkaboni Sead Zia Aldin, Pourkarimi Ziaeddin, Jannesar Malakooti Sajjad, Ebrahimi Ehsan (2023)., Journal of Mining and Environment (JME),, 15(2).

**5.** Mixed Anionic/Cationic Collectors for Pyrite Flotation: An Experimental and Theoretical Study. Javdantabar Kourosh, Gharabaghi Mahdi, Abdollahi Hadi, Mabudi Amir, Ojaghi Shirmard Mohammadamin (2023)., Mineral Processing and Extractive Metallurgy Review, 1(1), 1-13.

**6.** Evaluation of the effects of L-cysteine addition on the bioleaching of zinc and cadmium from sphalerite flotation concentrate. Kordlo Mehrdad, Abdollahi Hadi, Gharabaghi Mahdi, Yadollahi Ali, Rezaei Ali (2023)., MINERALS ENGINEERING, 204(108379).

**7.** Column Bioleaching of Nickel from Sulfidic Samples with Different Nickel and Magnesium Content. Mohammadzadeh Amirhossein, Abdollahi Hadi, Gharabaghi Mahdi, Saneie Roozbeh, Mirmohammadi Mirsaleh (2023)., GEOMICROBIOLOGY JOURNAL, 1(1).

**8.** Application of deep eutectic solvents (DESs) as a green lixiviant for extraction of rare earth elements from caustic-treated monazite concentrate. Shakiba Ghazaleh, Saneie Roozbeh, Abdollahi Hadi, Ehsan Ebrahimi, Rezaei Ali, Mohammadkhani Mohsen (2023)., Journal of Environmental Chemical Engineering, 11(110777).

**9.** An Experimental and DFT Study on Using the Thiosulfate–Glycine Complex as an Alternative Agent of Cyanide in the Gold Leaching Process. Rezaee Mohammad, Shafahi Tonkaboni Sead Zia Aldin, Abdollahi Hadi, Mohammadnejad Sima, امیر معبودی (2023)., Journal of Sustainable Metallurgy, 1(1).

**10.** Bioleaching of zinc, copper and antimony from a tetrahedrite concentrate using acidophilic microorganisms. Aghazadeh Sajjad, Abdollahi Hadi, Gharabaghi Mahdi, Mirmohammadi Mirsaleh (2023)., HYDROMETALLURGY, 219(106075).

**11.** An environmentally friendly method for extraction of cobalt and molybdenum from spent catalysts using deep eutectic solvents (DESs). Ehsan Ebrahimi, SAFARI HASAN, Rezaee Mohammad, Rezaei Ali, Abdollahi Hadi (2023)., Environmental Science and Pollution Research, 1(1).

**12.** Genetic algorithm-assisted artificial neural network modelling for remediation and recovery of Pb (II) and Cr(VI) by manganese and cobalt spinel ferrite super nanoadsorbent. Rafie Seyed Faridedin, Abdollahi Hadi, Sayahi Hani, Doulati Ardejani Faramarz, Aghapour Kiomars, Karimi Mohammad Hosein, Kaur Brar Satinder, Magdouli Sara (2023)., CHEMOSPHERE, 321(138162).

**13.** Green Extraction of Heavy Metals from Tetrahedrite-Rich Concentrates Using Mechanical Activation-Assisted Bioleaching. Aghazadeh Sajjad, Abdollahi Hadi, Gharabaghi Mahdi, Mirmohammadi Mirsaleh (2023)., Journal of Sustainable Metallurgy, 1(1).

**14.** Synthesizing of magnesium and nickel nanoparticles from spent methane dry reforming catalyst using sol–gel method: process flow diagram development. Razzazan Fatemeh, Abdollahi Hadi, Doulati Ardejani Faramarz, Gharabaghi Mahdi, Ghassa Sina (2023)., Journal of Material Cycles and Waste Management, 1(1).

**15.** Recovery of gold ions from wastewater using a three-compartment electrodialysis separation system. Rezayi Homa, Abdollahi Hadi, Ghassa Sina (2023)., International Journal of Environmental Science and Technology, 1(1).

**16.** Spent-medium leaching of germanium, vanadium and lithium from coal fly ash with biogenic carboxylic acids and comparison with chemical leaching. Rezayi Homa, Shafahi Tonkaboni Sead Zia Aldin, Abdollahi Hadi, Ghassa Sina, Boroumand Zohreh, Fallah Nosratabad Alireza (2023)., HYDROMETALLURGY, 217(106038), 106038.

**17.** Green extraction of pure ferromagnetic nickel from spent hydroprocessing catalysts via deep eutectic solvents. Ehsan Ebrahimi, Abdollahi Hadi, Shafahi Tonkaboni Sead Zia Aldin, Ghanbarzad Minoo, Talebi Esmaeel (2023)., SEPARATION AND PURIFICATION TECHNOLOGY, 313(123461), 123461.

**18.** Mineralogy and Characterisation Studies Aimed at Coal Desulfurization Process on Iran’s Largest Coalfield. Jannesar Malakooti Sajjad, Abdollahi Hadi, Pourkarimi Ziaeddin, Karimi Shahraki Behrouz, Rahimi Mehdi, Shahbazi Mohammadreza, Rahmanian kooshkaki Ahmad (2023)., Journal of Mining and Environment (JME),, 1(1).

**19.** Eco-friendly recovery of base and precious metals from waste printed circuit boards by step-wise glycine leaching: Process optimization, kinetics modeling, and comparative life cycle assessment. Rezaee Mohammad, Saneie Roozbeh, Mohammadzadeh Amirhossein, Abdollahi Hadi, Kordlo Mehrdad, Rezaee Ali, Vahidi Ehsan (2023)., JOURNAL OF CLEANER PRODUCTION, 389(136016).

**20.** Desulfurization of Tabas coal using chemical (Meyers, Molten caustic leaching) and biological (bioleaching) methods. Shahbazi Mohamad Reza, Abdollahi Hadi, Shafahi Tonkaboni Sead Zia Aldin, Pourkarimi Ziaeddin, Jannesar Malakooti Sajjad, Rahimi Mahdi, Ehsan Ebrahimi (2022)., International Journal of Mining and Geo-Engineering, 57(1).

**21.** Green recycling of spent Li-ion batteries by deep eutectic solvents (DESs): Leaching mechanism and effect of ternary DES. Jafari Mohammad, Shafahi Tonkaboni Sead Zia Aldin, Abdollahi Hadi, Entezari-Zarandi Ali (2022)., Journal of Environmental Chemical Engineering, 10(6).

**22.** Green extraction of nickel and valuable metals from pyrrhotite samples with different crystallographic structures through acidophilic bioleaching. Khodadadmahmoudi Gholamreza, Abdollahi Hadi, Mohammadzadeh Amirhossein, Saneie Roozbeh, Mirmohammadi Mirsaleh, Rezaei Ali, Jozanikohan Golnaz, Naderi Hojat (2022)., JOURNAL OF ENVIRONMENTAL MANAGEMENT, 317(115394).

**23.** Modelling of limestone calcination for optimisation of parallel flow regenerative shaft kiln (PFR), case study: Iran Alumina Plant. Mirzaei Hosseinali, Noaparast Mohammad, Abdollahi Hadi (2022)., Archives of Mining Sciences, 67(2), 209-222.

**24.** A cleaner approach for high-efficiency regeneration of base and precious metals from waste printed circuit boards through stepwise oxido-acidic and thiocyanate leaching. Rezaee Mohammad, Abdollahi Hadi, Saneie Roozbeh, [] [], Rezaei Ali, Karimi Mohammad Hosein, Kaur Brar Satinder, Magdouli Sara (2022)., Chemosphere, 298(1), 134283.

**25.** Intelligent modelling for the elimination of lanthanides (La3+, Ce3+, Nd3+ and Eu3+) from aqueous solution by magnetic CoFe2O4 and CoFe2O4-GO spinel ferrite nanocomposites. Asadi Reza, Abdollahi Hadi, Boroumand Zohreh, Shafiee Kisomi Amir, Karimi Mohammad Hosein, Magdouli Sara, Kaur Brar Satinder (2022)., ENVIRONMENTAL POLLUTION, 1(119770), 119770.

**26.** Acid bioleaching of select sphalerite samples of variable Zn- and Fe-contents. Abdollahi Hadi, Mirmohammadi Mirsaleh, Ghassa Sina, Jozanikohan Golnaz, Boroumand Zohreh, Tuovinen Olli (2022)., HYDROMETALLURGY, 212(105897).

**27.** A sustainable method for germanium, vanadium and lithium extraction from coal fly ash: Sodium salts roasting and organic acids leaching. رضایی هما, Shafahi Tonkaboni Sead Zia Aldin, Abdollahi Hadi, Shahidi Alireza, Ghassa Sina (2022)., FUEL, 312(1), 122844.

**28.** Selective precipitation of iron from multi-element PLS produced by atmospheric leaching of Ni-Co bearing laterite. Hosseini Nasab Marzieh, Noaparast Mohammad, Abdollahi Hadi (2022)., International Journal of Mining and Geo-Engineering, 56(2).

**29.** A Green Approach for Selective Ionometallurgical Separation of Lithium from Spent Li-Ion Batteries by Deep Eutectic Solvent (DES): Process Optimization and Kinetics Modeling. Jafari Mohammad, Shafahi Tonkaboni Sead Zia Aldin, Abdollahi Hadi, Entezari-Zarandi Ali (2022)., Mineral Processing and Extractive Metallurgy Review, 1(1), 1-13.

**30.** Recovery of Copper and Aluminum from Spent Lithium-Ion Batteries by Froth Flotation: A Sustainable Approach. Saneie Roozbeh, Abdollahi Hadi, Ghassa Sina, داریوش عزیزی, Chehreh Chelgani Saeid (2022)., Journal of Sustainable Metallurgy, 1(1).

**31.** A Selective Method for Chemical Extraction of Antimony from Tetrahedrite-Rich Concentrate by BaS and K2S Lixiviants: Mechanism and Kinetic Studies. Aghazadeh Sajjad, Abdollahi Hadi, Gharabaghi Mahdi, Mirmohammadi Mirsaleh (2022)., Journal of Sustainable Metallurgy, 1(1).

**32.** Electrowinning of Nickel and Cobalt from Non-circulated Sulfate Electrolyte. Kazem-Ghamsari Amin, Abdollahi Hadi (2022)., TRANSACTIONS OF THE INDIAN INSTITUTE OF METALS, 1(1).

**33.** Inhibitory Effect of Solvent Extractants on Growth and Metabolism of Acidophiles. Saneie Roozbeh, Abdollahi Hadi, Shafahi Tonkaboni Sead Zia Aldin, [] [] (2021)., Mineral Processing and Extractive Metallurgy Review, 1(1).

**34.** Optimization of Pyrite Bio-Oxidation to Produce Ferric Reagent for Sphalerite Leaching. Ghassa Sina, Noaparast Mohammad, Shafahi Tonkaboni Sead Zia Aldin, Abdollahi Hadi, Gharib Fariborz, Magdouli Sara (2021)., Journal of Hazardous Toxic and Radioactive Waste, 26(1).

**35.** Bioleaching of Low-Grade Ni-Sulfide Samples with a Mesophilic Consortium of Iron- and Sulfur-Oxidizing Acidophiles. Khandan Niloufar, Abdollahi Hadi, Gharabaghi Mahdi, Mirmohammadi Mirsaleh, Ghassa Sina, Tuovinen Olli (2021)., GEOMICROBIOLOGY JOURNAL, 1(1), 1-9.

**36.** Bio-oxidation of Gold from Refractory Sulfide Ores: A Journey Ahead. Karimi Darvanjooghi Mohammad Hossein, Magdouli Sara, Kaur Brar Satinder, Abdollahi Hadi, Zolfaghari Mehdi (2021)., GEOMICROBIOLOGY JOURNAL, 1(1), 1-17.

**37.** Bio-oxidation behavior of pyrite, marcasite, pyrrhotite, and arsenopyrite by sulfur- and iron-oxidizing acidophiles. Yadollahi Ali, Abdollahi Hadi, Doulati Ardejani Faramarz, Mirmohammadi Mirsaleh, Magdouli Sara (2021)., Bioresource Technology Reports, 15(100699), 100699.

**38.** Bioleaching of cobalt from magnetite-rich cobaltite-bearing ore. Abdollahi Hadi, Saneie Roozbeh, Shafahi Tonkaboni Sead Zia Aldin, Mirmohammadi Mirsaleh, [] [], Tuovinen Olli (2021)., HYDROMETALLURGY, 204(105727), 105727.

**39.** Studies on the effects of physical parameters of filtration process on the fluid flow characteristics and de-watering efficiency of copper concentrate. Rezaei Amirhossein, Abdollahi Hadi, Gharabaghi Mahdi, Momghaderi Hassan (2021)., International Journal of Mining and Geo-Engineering, 55(2).

**40.** The Novel Lixiviants for Maximizing Antimony Extraction from Tetrahedrite-Rich Concentrate: Mechanism and Kinetic Studies. Aghazadeh Sajjad, Abdollahi Hadi, Gharabaghi Mahdi, Mirmohammadi Mirsaleh (2021)., Mineral Processing and Extractive Metallurgy Review, 1(1).

**41.** Iron oxide nanocomposite and its application in adsorption process for water treatment. رفیعی سید فرید الدین, Abdollahi Hadi, Sayahi Hani (2021)., Green chemistry and sustainable technology, 1(6).

**42.** The effect of inorganic acids on reducing iron impurities during iron-rich laterite ore leaching. Hosseini Nasab Marzieh, Noaparast Mohammad, Abdollahi Hadi (2021)., International Journal of Mining and Geo-Engineering, 55(2).

**43.** Direct and Indirect Bio-Leaching of Co and Ni from an Iron-Rich Laterite Ore using Delftia Acidovorans and Acidithiobacillus Ferrooxidans. Hoseini Nasab Marzieh, Noaparast Mohammad, Abdollahi Hadi (2021)., Journal of Mining and Environment (JME),, 12(3).

**44.** Superadsorbent Fe3O4-Coated Carbon Black Paramagnetic Nanocomposite for Separation of Light Rare Earth Elements (Ce, La and Nd) from Aqueous Solution and Mechanism Interpretation by Using GMDH-Based Neural Network and Sensitivity Analysis. Abdollahi Hadi, Maleki Soudabeh, Sayahi Hani, Gharabaghi Mahdi, Karimi Darvanjooghi Mohammad Hossein, Magdouli Sara, Kaur Brar Satinder (2021)., JOURNAL OF HAZARDOUS MATERIALS, 416(125655).

**45.** Acid Bioleaching of Copper from Smelter Dust at Incremental Temperatures. Ebrahimpour Shahram, Abdollahi Hadi, Gharabaghi Mahdi, Manafi Zahra, Tuovinen Olli (2021)., Mineral Processing and Extractive Metallurgy Review, 1(1), 1-10.

**46.** Modeling and Optimizing Aluminum Hydroxide Precipitation Process in Industrial Scale; case study: Iran Alumina Plant. Mirzaei Hosseinali, Noaparast Mohammad, Abdollahi Hadi (2021)., Journal of Mining and Environment (JME),, 12(2).

**47.** Selective leaching of antimony from tetrahedrite rich concentrate using alkaline sulfide solution with experimental design: Optimization and kinetic studies. Aghazadeh Sajjad, Abdollahi Hadi, Gharabaghi Mahdi, Mirmohammadi Mirsaleh (2021)., Journal of the Taiwan Institute of Chemical Engineers, 1(1).

**48.** Iron scrap, a sustainable reducing agent for waste lithium ions batteries leaching: An environmentally friendly method to treating waste with waste. Ghassa Sina, Farzanegan Akbar, Gharabaghi Mahdi, Abdollahi Hadi (2020)., RESOURCES CONSERVATION AND RECYCLING, 166(105348).

**49.** Novel bioleaching of waste lithium ion batteries by mixed moderate thermophilic microorganisms, using iron scrap as energy source and reducing agent. Ghassa Sina, Farzanegan Akbar, Gharabaghi Mahdi, Abdollahi Hadi (2020)., HYDROMETALLURGY, 197(105465), 105465.

**50.** Kinetics of two-step bioleaching of Ni and Co from iron rich-laterite using supernatant metabolites produced by Salinivibrio kushneri as halophilic bacterium. Hosseini Nasab Marzieh, Noaparast Mohammad, Abdollahi Hadi, Amozegar Mohammad (2020)., HYDROMETALLURGY, 195(1), 105387.

**51.** The reductive leaching of waste lithium ion batteries in presence of iron ions: Process optimization and kinetics modelling. Ghassa Sina, Farzanegan Akbar, Gharabaghi Mahdi, Abdollahi Hadi (2020)., JOURNAL OF CLEANER PRODUCTION, 262(1), 121312.

**52.** Dissolution of Nickel and Cobalt from Iron-Rich Laterite Ores Using Different Organic Acids. Hosseini Nasab Marzieh, Noaparast Mohammad, Abdollahi Hadi (2020)., Journal of Mining and Environment (JME),, 1(1).

**53.** Indirect bioleaching of Co and Ni from iron rich laterite ore, using metabolic carboxylic acids generated by P. putida, P. koreensis, P. bilaji and A. niger. Hosseini Nasab Marzieh, Noaparast Mohammad, Abdollahi Hadi, Amozegar Mohammad (2020)., HYDROMETALLURGY, 193(1), 105309.

**54.** Extraction and stripping of Cu and Ni from synthetic and industrial solutions of Sarcheshmeh Copper Mine containing Cu, Ni, Fe and Zn ions. Soeezi Amirhossein, Abdollahi Hadi, Shafahi Tonkaboni Sead Zia Aldin, RAHIMI Esmaeil (2020)., TRANSACTIONS OF NONFERROUS METALS SOCIETY OF CHINA, 30(2), 518-534.

**55.** Dissolution optimization and kinetics of nickel and cobalt from iron‐rich laterite ore, using sulfuric acid at atmospheric pressure. Hosseini Nasab Marzieh, Noaparast Mohammad, Abdollahi Hadi (2020)., INTERNATIONAL JOURNAL OF CHEMICAL KINETICS, 1(1).

**56.** Effective removal of Zn (II) ions from aqueous solution by the magnetic MnFe2O4 and CoFe2O4 spinel ferrite nanoparticles with focuses on synthesis, characterization, adsorption, and desorption. Asadi Reza, Abdollahi Hadi, Gharabaghi Mahdi, Boroumand Zohreh (2020)., ADVANCED POWDER TECHNOLOGY, 1(1).

**57.** Effects of flocculant, surfactant, coagulant, and filter aid on efficiency of filtration processing of copper concentrate: mechanism and optimization. Rezaei Amirhossein, Abdollahi Hadi, Gharabaghi Mahdi, Mohammadzadeh Ali Asghar (2019)., Journal of Mining and Environment (JME),, 1(1).

**58.** Solvent extraction and stripping of zinc from synthetic chloride solution in presence of manganese and cadmium as impurities. Jafari Hossein, Abdollahi Hadi, Gharabaghi Mahdi, Balesini Ali Asghar (2019)., Journal of Mining and Environment (JME),, 1(1).

**59.** Effects of Conventional Flotation Frothers on the Population of Mesophilic Microorganisms in Different Cultures. Jafari Mohammad, Golzadeh Mehdi, Shafahi Tonkaboni Sead Zia Aldin, Abdollahi Hadi, Gharabaghi Mahdi, Chehreh Chelgani Saeid (2019)., Processes, 7(653), 1-17.

**60.** Dissolution of aluminum from metakaolin with oxalic, citric and lactic acids. Karbalaei Saleh Danyal, Abdollahi Hadi, Noaparast Mohammad, Fallah Nosratabad Alireza (2019)., CLAY MINERALS, 28(1), 1-27.

**61.** Study effects of conventional flotation reagents on bioleaching of zinc sulfide. Jafari Mohammad, Chehreh Chelgani Saeid, Shafahi Tonkaboni Sead Zia Aldin, Abdollahi Hadi, Hadavandi Esmaeil (2019)., JOURNAL OF INDUSTRIAL AND ENGINEERING CHEMISTRY, 5(33).

**62.** Dissolution of Al from metakaolin with carboxylic acids produced by Aspergillus niger, Penicillium bilaji, Pseudomonas putida, and Pseudomonas koreensis. Karbalaei Saleh Danyal, Abdollahi Hadi, Noaparast Mohammad, Fallah Nosratabad Alireza, Tuovinen Olli H. (2019)., HYDROMETALLURGY, 1(1).

**63.** Recent developments in configuration design and optimization of mineral separation circuits; A Review. Radmehr Vahid, Shafahi Tonkaboni Sead Zia Aldin, Noaparast Mohammad, Abdollahi Hadi (2019)., International Journal of Mining and Geo-Engineering, 53(1).

**64.** Flotation of zinc silicate ore: A focus on effective parameters, synergistic effect of mixed cationic collectors and its mechanism. Karimi Pouya, Abdollahi Hadi, Shafahi Tonkaboni Sead Zia Aldin, Molaei Aysan (2019)., International Journal of Mining and Geo-Engineering, 53(1), 1-9.

**65.** Prediction and optimization studies for bioleaching of molybdenite concenrate using artificial neural networksnd genetic algorithm. Abdollahi Hadi, Noaparast Mohammad, Shafahi Tonkaboni Sead Zia Aldin, Akcil Ata, Panda Sandeep, Hazrati Kashi Mohammad, Karimi Pouya (2019)., MINERALS ENGINEERING, 130(-).

**66.** A Comparative Assessment on the Effect of Different Supplemental Iron Sources on the Bio-dissolution of Zn, Pb, Cd, and As from a High-grade Zn–Pb Ore. Ghassa Sina, Abdollahi Hadi, Najafi Elham, Boromand Zohreh, Panda Sandeep, Akcil Ata (2018)., Mining, Metallurgy & Exploration, 1(1), 1-14.

**67.** Optimizing flotation circuit recovery by effective stage arrangements: A case study1. Radmehr Vahid, Shafahi Tonkaboni Sead Zia Aldin, Noaparast Mohammad, Abdollahi Hadi (2018)., Minerals, 8(417).

**68.** Study of the effects of conventional reagents for sulfide flotation on bio-oxidation activity of Acidithiobacillus ferrooxidans. Jafari Mohammad, Shafahi Tonkaboni Sead Zia Aldin, Abdollahi Hadi, Gharabaghi Mahdi, Chehreh Chelgani Saeid (2018)., CHEMICAL ENGINEERING COMMUNICATIONS, 1(1), 1-13.

**69.** Effects of type and dosages of organic depressants on pyrite floatability in microflotation system. Ahmadi Mehran, Gharabaghi Mahdi, Abdollahi Hadi (2018)., ADVANCED POWDER TECHNOLOGY, 1(1), 1-8.

**70.** Stage specialization for design and analysis of flotation circuits. Radmehr Vahid, Shafahi Tonkaboni Sead Zia Aldin, Noaparast Mohammad, Abdollahi Hadi (2018)., Journal of Mining and Environment (JME),, 1(1).

**71.** Acidophilic bioleaching: a review on the process and effect of organic–inorganic reagents and materials on its efficiency. Jafari Mohammad, Abdollahi Hadi, Shafahi Tonkaboni Sead Zia Aldin, Gharabaghi Mahdi, Jafari Hossein, Akcil Ata, Panda Sandeep (2018)., Mineral Processing and Extractive Metallurgy Review, 1(1), 1-21.

**72.** MnFe 2 O 4 -graphene oxide magnetic nanoparticles as a high-performance adsorbent for rare earth elements: Synthesis, isotherms, kinetics, thermodynamics and desorption. Ghobadi Misagh, Gharabaghi Mahdi, Abdollahi Hadi, Boromand Zohreh, Moradian Marzieh (2018)., JOURNAL OF HAZARDOUS MATERIALS, 351(1), 308-316.

**73.** Solvent extraction of zinc from synthetic Zn-Cd-Mn chloride solution using D2EHPA: Optimization and thermodynamic studies. Jafari Hossein, Abdollahi Hadi, Gharabaghi Mahdi, Balesini Ali Asghar (2018)., SEPARATION AND PURIFICATION TECHNOLOGY, 197(1), 210-219.

**74.** A comparative study of two-stage flotation of Zn and Pb oxide minerals using anionic, cationic, and mixed (cationic/anionic) collectors. Salehfard Meysam, Noaparast Mohammad, Shafahi Tonkaboni Sead Zia Aldin, Abdollahi Hadi (2018)., Journal of Mining and Environment (JME),, 1(1).

**75.** Moderate Thermophilic Bioleaching of Cu, Mo and Re from Molybdenite Concentrate: Effects of Silver Ion, Medium and Energy Sources. Abdollahi Hadi, Shafahi Tonkaboni Sead Zia Aldin, Noaparast Mohammad, Manafi Zahra (2017)., International Journal of Mining and Geo-Engineering, 51(2).

**76.** A study on the zinc sulfide dissolution kinetics with biological and chemical ferric reagents. Ghassa Sina, Noaparast Mohammad, Shafahi Tonkaboni Sead Zia Aldin, Abdollahi Hadi, Gharabaghi Mahdi, Boruomand Zohreh (2017)., HYDROMETALLURGY, 171(-), 362-373.

**77.** Effect of Flotation Reagents on the Activity of L. Ferrooxidans. Jafari Mohammad, Shafahi Tonkaboni Sead Zia Aldin, Abdollahi Hadi, Gharabaghi Mahdi, Chehreh Chelgani Saeid (2017)., Mineral Processing and Extractive Metallurgy Review, ISSN: 0882-7508(ISSN: 0882-7508), 1-10.

**78.** A Simple and Low-Cost Route to Recycle Rare Earth Elements (La, Ce) from Aqueous Solution by Magnetic Nanoparticles of CoxMn1-xFe2O4 (x= 0.2 and 0.8): Synthesis, Isotherms, Kinetics, Thermodynamics and Desorption. Ghobadi Misagh, Gharabaghi Mahdi, Abdollahi Hadi, شفیعی امیر (2017)., NEW JOURNAL OF CHEMISTRY, 1(1), 1.

**79.** A Comparative Study on the Effect of Flotation Reagents on Growth and Iron Oxidation Activities of Leptospirillum ferrooxidans and Acidithiobacillus. Jafari Mohammad, Shafahi Tonkaboni Sead Zia Aldin, Abdollahi Hadi, Gharabaghi Mahdi, Chehreh Chelgani Saeid (2016)., Minerals, 7(1), 2.

**80.** Evaluation of Flotation Circuit Layout by combining Linear Circuit Analysis and Signal Flow Diagram, Case study: Galehzari Copper Mine. Radmehr Vahid, Shafahi Tonkaboni Sead Zia Aldin, Noaparast Mohammad, Abdollahi Hadi (2016)., Journal of Mining Engineering, 11(32).

**81.** Direct cyanidation and roasting combination of a semi-refractory massive sulfide ore. Abdollahi Hadi, Karimi Fariborz, امینی احمد, Akcil Ata (2015)., Minerals and Metallurgical Processing, 32(3), 161.

**82.** Empirical model for bio-extraction of copper from low grade ore using response surface methodology. Yaghobi Moghaddam Mahdi, Shafahi Tonkaboni Sead Zia Aldin, Noaparast Mohammad, Doulati Ardejani Faramarz, Abdollahi Hadi, Ranjbar Mohammad Reza, Schaffie Mmm, Manafi Zahra (2015)., TRANSACTIONS OF NONFERROUS METALS SOCIETY OF CHINA, 25(12).

**83.** Acidic Leaching with Chlorate as Oxidizing Agent to Extract Mo and Re from Molybdenite Flotation Concentrate in a Copper Plant. Abdollahi Hadi, Noaparast Mohammad, Shafahi Tonkaboni Sead Zia Aldin, Manafi Zahra, Erust Ceren, Akcil Ata (2015)., SEPARATION SCIENCE AND TECHNOLOGY, 1(1), 150623140516001.

**84.** Silver-catalyzed bioleaching of copper, molybdenum and rhenium from a chalcopyrite-molybdenite concenrate. Abdollahi Hadi, Noaparast Mohammad, Shafahi Tonkaboni Sead Zia Aldin, Manafi Zahra, Munoz Jesus A., Tuovinen Olli H. (2015)., International Biodeterioration and Biodegradation, 104(-).

**85.** Application of raw, HCl- and H 2 SO 4 -activated bentonite as adsorbents for the removal of Zn 2+ and Pb 2+ from aqueous solution. Rezapour Meghdad, Abdollahi Hadi, حمید خرمی, Taghavi valmazuei javad (2014)., Desalination and Water Treatment, 1(1), 1-10.

**86.** Bioleaching of high grade Zn–Pb bearing ore by mixed moderate thermophilic microorganisms. Abdollahi Hadi (2014)., SEPARATION AND PURIFICATION TECHNOLOGY, 136(-), 241-249.

**87.** Microbial Dissolution of Zn-Pb Sulfide Minerals Using Mesophilic Iron and Sulfur-Oxidizing Acidophiles. Abdollahi Hadi (2014)., Mineral Processing and Extractive Metallurgy Review, 36(2), 112-122.

**88.** Modeling industrial thickener using computational fluid dynamics (CFD), a case study: Tailing thickener in the Sarcheshmeh copper mine. Taghizadeh Ebrahim, Soltani Elias, Shahrivar Abdal, Abdollahi Hadi (2013)., International Journal of Mining Science and Technology, 23(6), 885-892.

**89.** Application of response surface methodology and central composite rotatable design for modeling the influence of some operating variables of the lab scale thickener performance. Aghajani Seifollah, Azizi Aydin, Ardalan Maryam, Vafaei Maria E Aguilar, پشمی مرتضی, Abdollahi Hadi (2013)., International Journal of Mining Science and Technology, 23(5), 717-724.

***Books***

**1.** Introduction of nanotechnology applications in mining. Gharib Fariborz, کارگر مریم, برومند زهره, Abdollahi Hadi, Karamozian Mohammd, رحمانی بهنام (2022).

**2.** Homogenizing/Blending Systems and Material Handling in Mineral Processing Plants (Fundamental and Design Principles) volume 1. Abdollahi Hadi, Noaparast Mohammad, Unesi Majid (2018).

***Conferences***

**1.** Investigating spent medium of acidophilic and alkalinophilic microorganisms and producer of organic acid in dissolving nickel, cobalt, arsenic, Copper and iron from Nickeline ore. برومند زهره, Abdollahi Hadi, نجفی اصل پاشاکی شبنم, Mirmohammadi Mirsaleh (2023)., The 41th National Geoscience Congress, 21-22 February, Tehran, Iran.

**2.** Mineralogical study of low- and high -grade nickeline samples with optical microscopy, XRD and SEM. برومند زهره, Abdollahi Hadi, Mirmohammadi Mirsaleh (2023)., The 41th National Geoscience Congress, 21-22 February, Tehran, Iran.

**3.** Removing lead and cobalt metals from synthetic solutions by expanded perlite. شعیبی وحیده سادات, Noaparast Mohammad, Abdollahi Hadi, برومند زهره (2021)., 39th National Congress and 4th International Congress of Earth Science, 22-23 February, Tehran, Iran.

**4.** The effect of coal fly ash on the environment, human and animal life. رضایی هما, Shafahi Tonkaboni Sead Zia Aldin, Abdollahi Hadi, برومند زهره (2021)., 39th National Congress and 4th International Congress of Earth Science, 22-23 February, Tehran, Iran.

**5.** Effects of different chemical reagents on the flotation of pure apatite and calcite. محرومی مصطفی, Abdollahi Hadi, Gharabaghi Mahdi (2021)., 9th Iranian Mining Engineering Conference and 6th International Mine & Mining Industries Congress, 21-23 February, Tehran, Iran.

**6.** Bioleaching of nickel from low-grade sulfide ore samples with a mixed moderate thermophilic bacteria. Khandan Niloufar, Abdollahi Hadi, Gharabaghi Mahdi, Mirmohammadi Mirsaleh (2021)., 9th Iranian Mining Engineering Conference and 6th International Mine & Mining Industries Congress, 21-23 February, Tehran, Iran.

**7.** Removal of Co (II) ions from mine wastewater by Nano montmorillonite modified with 8-hydroxyquinoline. صادقی نیلوفر, Gharabaghi Mahdi, Abdollahi Hadi, برومند زهره (2021)., 9th Iranian Mining Engineering Conference and 6th International Mine & Mining Industries Congress, 21-23 February, Tehran, Iran.

**8.** The optimization of nickel reductive leaching from spent lithium batteries in presence of iron ions. Ghassa Sina, Farzanegan Akbar, Gharabaghi Mahdi, Abdollahi Hadi (2020)., International Conference, Technology Development in Chemical Engineering, 6 March, Tehran, Iran.

**9.** Optimization of grinding process for spent lithium batteries using statistical experiment design. Ghassa Sina, Farzanegan Akbar, Gharabaghi Mahdi, Abdollahi Hadi (2020)., International Conference, Technology Development in Chemical Engineering, 6 March, Tehran, Iran.

**10.** Evaluation of the NaCl role in laterite chemical leaching using organic and inorganic acids. Hosseini Nasab Marzieh, Noaparast Mohammad, Abdollahi Hadi (2020)., 8th Iranian Mining Engineering Conference, 19-20 February, Birjand, Iran.

**11.** Comparison of bio-sulfuric acid with bioorganic acid as a solubilizing agent of nickel and cobalt from iron-rich laterites. Hosseini Nasab Marzieh, Noaparast Mohammad, Abdollahi Hadi (2020)., 8th Iranian Mining Engineering Conference, 19-20 February, Birjand, Iran.

**12.** Optimization of effective parameters in leaching of the most important oxide source containing nickel and cobalt using Design Expert 7 software. Hosseini Nasab Marzieh, Noaparast Mohammad, Abdollahi Hadi (2020)., 8th Iranian Mining Engineering Conference, 19-20 February, Birjand, Iran.

**13.** Copper production using environmental friendly methods, A review. ابراهیم پور شهرام, Abdollahi Hadi, اصلانی وحید, Manafi Zahra (2019)., 4th Applied chemistry of Iran, 23-25 July, Urmia, Iran.

**14.** Effect of spinel-iron-cobalt nanoparticle with graphene oxide to separate zinc element from real wastewater. برومند زهره, اسدی رضا, Ghobadi Misagh, Abdollahi Hadi, شهامی میرحسین, علیجانی مریم, Karamozian Mohammd (2018)., Second national conference of application of nano and biotechnology in geology and mine, 18 December, Iran.

**15.** Circuit Analysis: A key specification to design complex ores separation design. Radmehr Vahid, Shafahi Tonkaboni Sead Zia Aldin, Noaparast Mohammad, Abdollahi Hadi (2018)., 7th Iranian Mining Engineering Conference and 5th International Mine & Mining Industries Congress, 3-4 November, Tehran, Iran.

**16.** The kinetics study of Cu leaching from printed circuit board. Agababaei Shadi, Sied Alizadeh Sied Mohammad, محمد حیاتی, Abdollahi Hadi (2018)., National conference Metallurgy and Mining Engineering of Iran, 25 February, Ahwaz, Iran.

**17.** Determination of suitable filter fabric and its impact on the filtration process of copper concentrate, case study: Ghale Zari mine. Rezaei Amirhossein, Abdollahi Hadi, Gharabaghi Mahdi, Mohammadzadeh Ali Asghar (2018)., Water Management in Mineral Processing Industries, 24 January, Tehran, Iran.

**18.** The Surface Chemistry Characterization of Pyrite, Sphalerite and Molybdenite after Bioleaching. Ghassa Sina, Abdollahi Hadi, Gharabaghi Mahdi, Chehreh Chelgani Saeid, Jafari Mohammad (2017)., International Biohydrometallurgy Symposium, 24 September, Freiberg, Germany.

**19.** Examining the Effects of Typical Reagents for Sulfide Flotation on Bio-Oxidation Activity of Ferrous Iron Oxidizing Microorganisms. Jafari Mohammad, Shafahi Tonkaboni Sead Zia Aldin, Abdollahi Hadi, Gharabaghi Mahdi, Chehreh Chelgani Saeid, Ghassa Sina (2017)., International Biohydrometallurgy Symposium, 24 September, Freiberg, Germany.

**20.** Synthsis of MnFe2O iron spinel with various coating and their application for cadmium removal. Ghobadi Misagh, زهره برومند, Gharabaghi Mahdi, Abdollahi Hadi, Moradian Marzieh, Ghassa Sina (2017)., The First National Conference of Nano from Synthesis to Industry, 23-24 August, Tehran, Iran.

**21.** Synthsis of CoxMnyFe2O spinel and its application for cadmium removal. Ghobadi Misagh, زهره برومند, Gharabaghi Mahdi, Abdollahi Hadi, Moradian Marzieh, امیر شفیعی (2017)., The First National Conference of Nano from Synthesis to Industry, 23-24 August, Tehran, Iran.

**22.** Review and role of mineralogy studies to determine the degree of freedom of Sarvian iron ore, Markazi province, from mineral processing perspective. Ghobadi Zohreh, امیر پازوکی, Abdollahi Hadi (2017)., 24th Symposium of Crystallography and Mineralogy of Iran, 25-26 January, Iran.

**23.** The investigation of behavior of Sarvian iron ore in gravity separation and magnetic separation. Ghobadi Zohreh, امیر پازوکی, Abdollahi Hadi (2016)., Mineral Processing symposium, 22 November, Tehran, Iran.

**24.** The effects of chemical components and ions on the chemical and biological dissolution of copper sulfides. پروانه آزمایش فرد, Abdollahi Hadi (2015)., International Conference on Science and Engineering, 1-3 December, Dubai, United Arab Emirates.

**25.** Evaluation of flotation circuit arrangement with integrated linear circuit analysis and signal flow graph, Case study: Qaleh Zari copper plant. Amiri Hadi, Shafahi Tonkaboni Sead Zia Aldin, Noaparast Mohammad, Abdollahi Hadi (2015)., 1st International Conference on Mining, metals and Materials Eng.,, 9-11 November, Tehran, Iran.

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