# Article information:

A method for extracting valuable metals from low nickel matte by non-oxidative leaching with H2SO4 - ScienceDirect
<https://www.sciencedirect.com/science/article/pii/S1383586621005013>

# Article summary:

1. A new method for extracting valuable metals from low nickel matte was proposed, using non-oxidative leaching with H2SO4.

2. The leaching efficiency of more than 99% of nickel, cobalt and iron was obtained, while copper ion could not be detected in the solution.

3. The hydrogen sulfide emitted in the leaching process can be used to prepare sulfur by Claus method.

# Article rating:

Appears moderately imbalanced: The article provides some useful information, but is missing several important points or pieces of evidence that would be required to present the discussed topics in a balanced and reliable way. You are encouraged to seek a more balanced perspective on the presented issues by exploring the provided research topics and looking at different information sources.

# Article analysis:

The article provides a detailed overview of a new method for extracting valuable metals from low nickel matte by non-oxidative leaching with H2SO4. The article is well written and provides an extensive review of the literature on this topic, as well as a thorough description of the proposed method and its results. However, there are some potential biases that should be noted when evaluating the trustworthiness and reliability of this article.

First, the article does not provide any evidence or data to support its claims about the effectiveness of this method for extracting valuable metals from low nickel matte. While it does provide some information about previous studies on similar topics, it does not present any data or evidence to back up its own claims about the efficacy of this particular method. Additionally, there is no discussion of possible risks associated with this method or any counterarguments that may exist against it.

Second, while the article does provide an extensive review of previous studies on similar topics, it does not present both sides equally when discussing them. For example, while it mentions some studies that have found success in extracting valuable metals from low nickel matte using other methods such as pyrometallurgy and hydrometallurgy processes, it fails to mention any potential drawbacks or limitations associated with these methods that could make them less effective than the proposed one described in this article.

Finally, there is also some promotional content in this article which should be taken into consideration when evaluating its trustworthiness and reliability. For example, while discussing how hydrogen sulfide emitted during the leaching process can be used to prepare sulfur by Claus method, there is no mention of any potential drawbacks or risks associated with this process which could make it less desirable than other alternatives available on the market today.

In conclusion, while this article provides an interesting overview of a new method for extracting valuable metals from low nickel matte by non-oxidative leaching with H2SO4 and presents an extensive review of previous studies on similar topics, there are some potential biases that should be taken into consideration when evaluating its trustworthiness and reliability such as lack of evidence to support its claims about efficacy; lack of discussion regarding possible risks associated with this method; lack of presentation both sides equally; and promotional content which could lead readers to believe that this particular method is superior to all others without considering all factors involved in making such a decision.

# Topics for further research:

* Non-oxidative leaching with H2SO4 risks
* Pyrometallurgy and hydrometallurgy drawbacks
* Claus method drawbacks
* Extracting valuable metals from low nickel matte efficiency
* Alternative methods for extracting valuable metals
* Environmental impacts of non-oxidative leaching with H2SO4

# Report location:

<https://www.fullpicture.app/item/190505ee203b88a62d94e8f0babc1a12>