# Article information:

Minerals | Free Full-Text | Handheld LIBS for Li Exploration: An Example from the Carolina Tin-Spodumene Belt, USA
<https://www.mdpi.com/2075-163X/12/1/77>

# Article summary:

1. Laser-induced breakdown spectroscopy (LIBS) is an ideal tool for Li exploration because it can measure Li in minerals, rocks, soils, and brines in-situ in the field.

2. The Carolina Tin-Spodumene Belt (CTSB) hosts both barren and fertile pegmatites, with Li-enriched pegmatites containing spodumene, K-feldspar, albite, quartz, muscovite, and beryl.

3. This study demonstrates the potential of handheld LIBS to drastically reduce the time necessary to acquire geochemical data relevant to acquiring compositional information for pegmatites during a Li pegmatite exploration program.

# Article rating:

Appears well balanced: The article presents the information in a reliable and balanced way, without biases and prejudices. The claims made in the article are well supported and, where applicable, all sides of the argument are given opportunity to present their point of view. The article appears trustworthy and reliable.

# Article analysis:

The article “Handheld LIBS for Li Exploration: An Example from the Carolina Tin-Spodumene Belt, USA” provides a comprehensive overview of how laser-induced breakdown spectroscopy (LIBS) can be used for lithium exploration in the Carolina Tin-Spodumene Belt (CTSB). The article is well written and provides detailed information on the geological setting of the CTSB as well as a thorough description of LIBS technology and its applications.

The authors provide evidence to support their claims that LIBS is an effective tool for lithium exploration by citing previous studies that have used this technology successfully. They also provide examples of how LIBS can be used in practical applications such as measuring K/Rb ratios and Li contents of muscovite to rapidly determine the degree of pegmatite fractionation.

The article does not appear to be biased or one-sided; rather it presents both sides of the argument fairly and objectively. It does not make any unsupported claims or omit any points of consideration; rather it provides evidence to support its claims and explores counterarguments where appropriate. Furthermore, there is no promotional content or partiality present in the article; rather it presents an unbiased view on LIBS technology and its applications in lithium exploration. Finally, possible risks associated with using this technology are noted throughout the article.

In conclusion, this article is trustworthy and reliable due to its comprehensive coverage of LIBS technology and its applications in lithium exploration as well as its objective presentation of both sides of the argument without any bias or promotional content.

# Topics for further research:

* Laser-Induced Breakdown Spectroscopy (LIBS)
* Lithium Exploration
* Carolina Tin-Spodumene Belt (CTSB)
* K/Rb Ratios
* Muscovite Fractionation
* Risks of LIBS Technology

# Report location:

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