Dear Dr Subarkah

I recommend that you proceed with the revision based on the comments from the reviewers, along the lines of what detailed in your reply. Please make and effort to respond to as many comments as possible in the manuscript's main text, clarifying and adding information where needed.

In addition to the comments from the reviewers, I ask you to address the following points:

1. In methods, even if referring to a previous publications for the general set up, you should report the specific analytical conditions of those parameter that can change significantly from session to session, such as repetition rate, fluency, gas flow, spot size etc…

This is done in the Supplementary Information.

2. Improve figure 6 by (i) zooming into the data part in each of them rather than plot all diagrams with the same scale; (ii) increase the font size of the number on axis and (iii) ensure that Sr initial value and its uncertainty are quoted with the same number of digits (0.702 ± 0.006, and not ±0.0060).

Done.

3. None of the data plotted in figure 3, 4, 7 and 8A has uncertainties, for example for T, Sm/Nd, KI and other indexes. This suggests that either the uncertainty could not be calculated or it is smaller than the symbol. Please clarify in the caption which is the case and add an uncertainties wherever possible (an "typical uncertainty" cross at the corner of a diagram can also be used).

When they are not plotted in the figures, uncertainties are smaller than the symbol. However, they can be found in the Supplementary Information.

4. The advantage of in situ analysis is to show textural context, so it would be better to show the location of the laser spots on the images of figure 5. This would also show clearly your spatial resolution compared to the fine grain of the samples.

Done.

5. In the supplementary tables be aware of significant digits, particularly in Table S4 and LAICPMS element data. Reduce number to only significant digits.

Done.

6. For clarity, repeat title and authors of the paper in the Supplementary Material file.

Done.

Best regards
Daniela Rubatto
Associate Editor