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| Book Name: | [**Geography, Earth Science and Environment: Research Highlights**](https://www.bookpi.org/bookstore/product/geography-earth-science-and-environment-research-highlights-vol-1/) |
| Manuscript Number: | **Ms\_BPR\_4862** |
| Title of the Manuscript: | **ICP-MS - a tool for determination of strontium and lead isotopic ratios in environmental matrices** |
| Type of the Article | **Book Chapter** |

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| PART 1: Comments | | |
|  | Reviewer’s comment **Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer review.** | Author’s Feedback *(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.** | The isotopic signatures of strontium, such as 87Sr/86Sr, serve to identify geological origins and human influences in soil and water. Meanwhile, lead isotopes are instrumental in tracing pollution sources and historical usage trends. |  |
| **Is the title of the article suitable?**  **(If not please suggest an alternative title)** | The ICP-MS has been used as a tool for isotopic ratios for a while now, I suggest that the title be changed  Suggested title: Analysis of strontium and lead isotopic ratios in environmental matrices using ICP-MS. |  |
| Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here. | The study's methodology and relevance are summarized in the abstract, which also emphasizes the use of the 87Sr/86Sr and 206Pb/207Pb ratios as tracers for pollution sources. It might be improved, though, by briefly outlining the particular Romanian regions that were the subject of the study, the importance of the conclusions in terms of pollution or environmental damage, and a concise explanation of how the findings might affect environmental monitoring or policy. The abstract would be more thorough and relevant if these facts were included. |  |
| **Is the manuscript scientifically, correct? Please write here.** | The manuscript for determining the isotopic ratios of strontium and lead in environmental matrices is, in fact, scientific. This method makes it possible to determine isotopic compositions precisely, which is important for researching processes like environmental change, geological origins, and pollution tracing. Studying isotope ratios can reveal important information about natural versus man-made influences in a variety of environmental settings. |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.** | References are sufficient, relevant, and diverse. |  |
| Is the language/English quality of the article suitable for scholarly communications? | The language is fine |  |
| Optional/General comments | Accept with minor revision. |  |

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| **PART 2:** | | |
|  | Reviewer’s comment | Author’s comment *(if agreed with the reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Are there ethical issues in this manuscript?** | *(If yes, Kindly please write down the ethical issues here in detail)* |  |

**Reviewers:**

**Naomi Dikeledi Mokhine, Joint Institute of Nuclear Research, Russia**