

# Review of: "Future Trends in Ground Improvement: A Review"

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This manuscript attempted to review future trends in ground improvement from the aspects of sustainable techniques, advanced materials, autonomous geotechnical machinery and sensors, machine learning-aided data analysis, and integration of geothermal, etc. While the authors have synthesized some of the recent research, the current version demonstrates that the authors are not well prepared for publication and lack a comprehensive understanding of the current landscape of this field in general.

Some major problems include:

1. As a topic review, this manuscript was very superficial in some areas with rapid growth in ground improvements; for instance, '2.1 Eco-Friendly Additives', '3.1 Nanomaterials', and '4.3 Machine Learning'. The reviewers are convinced that topics covering MICP/EICP-treated soils and machine learning or deep learning in geotechnics are very popular in the field of ground improvement, presenting large numbers of publications and maintaining considerable prospects for the future; however, the authors have overlooked these sections. For the missing publications, the reviewers prefer not to mention specific details to avoid conflicts of interest.
2. Merely stacking existing literatures would not generate a significant impact. What are the deeper insights from this review? What are the challenges involved in this research? There should be one chapter to address these, instead of focusing on the less professional topic of 'Education and International Collaboration'.
3. The categorization of existing chapters is not scientific; for instance, 'Chapter 2: Sustainable Ground Improvement Techniques' consists of eco-friendly additives and sustainability assessment, but is there a connection between the two paragraphs? Also, sustainability assessment does not fall under the category of 'Techniques'. This reflects that the categorization is rather arbitrary than rigorous, which makes the review read extremely misleading to an expert.
4. As a review article, delicate and attractive figures and tables are necessary, not only to express the authors' point of view, but also to lead readers and experts who are new to this field. However, there is merely one figure throughout this manuscript, which is a fatal problem for a review article, especially when emphasizing the future development of a certain field. This is a primary reason why the reviewers considered this manuscript unsuitable for publication.

