

Detailed Review of the Article: *"An overview of seismic isolation technology for super high and rise buildings"*

General Evaluation:

The manuscript provides an overview of seismic isolation technologies used in super high-rise buildings. The topic is highly relevant, and the authors have structured the article logically into key sections, including an introduction, development of seismic resistance methods, isolation devices, and a conclusion. However, the article largely relies on existing literature without introducing significant new insights, experimental validation, or case studies.

Strengths :

- **Relevant Topic:** The article addresses an important and timely issue in seismic engineering.
- **Logical Structure:** The document follows a coherent progression, from background to specific technologies and applications.
- **Application Examples:** International case studies enhance the article's practical relevance.

Weaknesses and Recommendations for Improvement:

Originality and Contribution:

- **Observation:** The manuscript primarily summarizes existing knowledge without presenting new findings, data, or innovative perspectives.
- **Recommendation:** Include original research results, such as experimental data, numerical modeling, or case-specific analyses of seismic isolation performance.

Data and Case Studies:

- **Observation:** The absence of real-world data or experimental validation reduces the article's scientific impact.
- **Recommendation:** Add concrete examples, experimental studies, or numerical simulations demonstrating the effectiveness of described technologies.

Methodology Section:

- **Observation:** While the paper discusses various isolation technologies, it lacks detailed explanations of how these methods are practically implemented or tested.
- **Recommendation:** Provide more technical details, including test protocols, material specifications, or modeling approaches, if applicable.

Figures and Visual Aids:

- **Observation:** The manuscript refers to several figures (e.g., Fig.1, Fig.2, Fig.3) that are missing from the document.
- **Recommendation:** Ensure all referenced figures are included with clear captions and explanations.

References and Citations:

- **Observation:** While references are listed, their integration into the text is sometimes superficial, with limited critical analysis.
- **Recommendation:** Deepen the discussion of key references and demonstrate how they support the presented arguments.

Linguistic and Stylistic Issues:

- **Observation:** There are instances of repetition, awkward phrasing, and inconsistent language style throughout the text.
- **Recommendation:**
 - Refine the text for clarity and precision.
 - Avoid redundancy and repetitive explanations.
 - Ensure consistency in technical terminology.

Future Perspectives:

- **Observation:** The conclusion summarizes the findings but does not offer meaningful insights into future research directions or practical applications.
- **Recommendation:** Include a dedicated subsection discussing potential advancements, challenges, and future research opportunities in seismic isolation technologies.

Section-by-Section Feedback:

Introduction:

- Strengths: Provides background on the significance of seismic design for high-rise buildings.
- Weaknesses: Some statistics could be updated, and the link between the introduction and the core theme of the article could be strengthened.
- **Suggestion:** Enhance the transition into the main sections by clearly stating the research objectives.

Section 1 – Development of Engineering Earthquake Resistance:

- Strengths: Good overview of traditional and modern seismic resistance methods.
- Weaknesses: Limited comparison between the described methods and no discussion of their relative effectiveness.
- **Suggestion:** Include comparative analysis tables or figures to highlight key differences and effectiveness between traditional and modern methods.

Structural Damping Energy Dissipation Combination System:

- Strengths: Explores hybrid technologies effectively.
- Weaknesses: Lacks practical examples or quantitative data.
- **Suggestion:** Add case studies or examples of specific hybrid systems in action.

Section 3 – Damping and Isolation Devices:

- Strengths: Provides an overview of device types and their functionality.
- Weaknesses: Missing referenced figures; limited technical details about the devices.
- **Suggestion:** Include the missing figures, provide explanations for each type of device, and include practical examples.

Section 4 – Applications of Seismic Isolation Devices:

- Strengths: Highlights global case studies (e.g., Tokyo Sky Tree, San Francisco International Airport).
- Weaknesses: Discussion is surface-level and lacks technical details about these projects.

- **Suggestion:** Expand on these examples with specific performance metrics and outcomes.

Conclusion:

- Strengths: Summarizes key findings.
 - Weaknesses: Does not offer forward-looking insights or recommendations for future studies.
 - **Suggestion:** Add a subsection discussing future directions and areas for further investigation.
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Final Decision:

Recommendation: Major Revision

Justification:

- The article has a solid foundation but lacks originality, experimental data, and clarity in some areas.
- Missing figures and underdeveloped sections weaken the overall impact.
- Improvements in writing style and technical depth are essential.

Action Items for Authors:

1. Include experimental data, numerical modeling results, or case studies.
2. Ensure all referenced figures are included and explained.
3. Deepen the discussion of cited references and integrate them critically into the text.
4. Refine linguistic style to improve clarity and reduce redundancy.
5. Expand the conclusion with future research directions and practical recommendations.