|  |
| --- |
|  |
| Book Name: | [**Engineering Research: Perspectives on Recent Advances**](https://www.bookpi.org/bookstore/product/engineering-research-perspectives-on-recent-advances-vol-1/) |
| Manuscript Number: | **Ms\_BPR\_4815** |
| Title of the Manuscript:  | **Seismic Analysis of G+8 RC Building Frame having Setback Irregularity and Subjected to Mainshock-Aftershocks Sequences** |
| Type of the Article | **Book Chapter** |

|  |
| --- |
| 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.** | **It is known that structural irregularities significantly affect the dynamic behavior of buildings. In the relevant study, examining the effect of structural irregularities and mainshock-aftershock sequences can contribute to the literature.** |  |
| **Is the title of the article suitable?****(If not please suggest an alternative title)** | **Yes** |  |
| 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. | **Yes** |  |
| **Is the manuscript scientifically, correct? Please write here.**  | **Yes** |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.****-** | **Yes** |  |
| Is the language/English quality of the article suitable for scholarly communications? | **The English quality of the study should be reviewed.** |  |
| Optional/General comments | 1. What is the difference between this study and the existing studies in the literature? It should be stated more clearly which gap in the literature such a study was conducted to fill.
2. The authors mention 3 different building models. In the B2 model, it is assumed that the floor area decreases by 26.66% from the 7th floor to the 9th floor. How was this rate determined and why did this decrease start on the 7th floor? The answers to these questions should be added to the study.
3. What is the total number of elements and nodes used in the analyses? This information should be added to the study.
4. Why was nonlinear time history analysis not preferred instead of linear time history analysis?
5. Was mesh convergence performed during the creation of the building models? Information should be provided in the article on this subject.
6. It is recommended that the section views of the columns and beams used in the building models be given in the study.
7. To which component of the relevant earthquakes do the acceleration records used in the analyses belong? From which stations were the acceleration records used in the study taken? This information should be added to the study.
8. The analysis findings were not discussed sufficiently in the study. The results obtained as a result of the analyses should be discussed in more detail and definitely compared with similar studies in the literature.
9. Since the shapes of the B1, B2 and B3 models are different, their weights are not the same. Building weight is an important parameter affecting the base shear force. Since the B1 model is the heaviest model, it is an expected result that the base shear force is higher. In this case, a clear comparison cannot be made regarding the effect of irregularity on the base shear force. Did the authors also take the building weight into account when comparing the base shear force results of different models?
10. Comparing the mode shapes and period values ​​by performing modal analyses on the models will enrich the study.
 |  |

|  |
| --- |
| **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)* |  |

**Reviewer details:**

**Ali Ekbe SEVER, Applied Sciences University of Isparta, Turkiye**