

Review Form 1.7

Journal Name:	Journal of Engineering Research and Reports
Manuscript Number:	Ms_JERR_105104
Title of the Manuscript:	Research on Bridge Damage Identification Method Based on Dynamic Characteristics
Type of the Article	Review Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<https://www.journaljerr.com/index.php/JERR/editorial-policy>)

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<p>Compulsory REVISION comments</p> <p>1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript)</p> <p>2. Is the title of the article suitable? (If not please suggest an alternative title)</p> <p>3. Is the abstract of the article comprehensive?</p> <p>4. Are subsections and structure of the manuscript appropriate?</p> <p>5. Do you think the manuscript is scientifically correct?</p> <p>6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</p> <p>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</p>	<p>1. The bridge designs which comply with current codes may satisfy safety and strength requirements; however, they may not have the capacity to withstand undesirable dynamic responds in the form of large displacements and consequently increased stress, which may affect the long-term performance of the bridge. During the operation of the bridge structure, various structural damages occur due to the complicated and complex loads. Failure to detect and handle bridge structure damage opportunely may cause serious accidents.</p> <p>2. yes</p> <p>3. can be improved</p> <p>4. can be improved</p> <p>5. yes</p> <p>6. In the reference list, these (and others) could be mentioned:</p> <p>1. Zhang, Y.; Tan, X.; Li, G.; Dong, J.; Guo, J.; Liu, F. Bridge Structure Damage Identification Based on Dynamic Characteristics. Coatings 2022, 12, 313. https://doi.org/10.3390/coatings12030313</p> <p>2. Zhu, X.; Cao, M.; Ostachowicz, W.; Xu, W. Damage Identification in Bridges by Processing Dynamic Responses to Moving Loads: Features and Evaluation. Sensors 2019, 19, 463. https://doi.org/10.3390/s19030463</p>	
<p>Minor REVISION comments</p> <p>1. Is language/English quality of the article suitable for scholarly communications?</p>	<p>English language fine. No issues detected</p>	
<p>Optional/General comments</p>	<p>Thank you to the editor for giving me the opportunity to review this paper.</p> <p>I think it would have been necessary to study a Damage scenario through which an analysis of the presented methods can be carried out and from which the applicability of these methods can be derived.</p> <p>For example, in the flexibility matrix method of analysis, the values of redundant forces necessary to ensure geometric continuity of structure are determined. Flexibility matrix method also called as force method is one of the basic structural analysis techniques that enables the civil engineer to analyse a structure using the energy methods like unit load method or strain energy method. The main disadvantage of flexibility method is a very complex algorithms for programming. The flexibility method is based upon the solution of equilibrium equations and compatibility equations. There will always be as many compatibility equations as redundants</p>	

PART 2:

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<p>Are there ethical issues in this manuscript?</p>	<p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p>	

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Reviewer Details:

Name:	Mihaela Toderas
Department, University & Country	University of Petrosani, Romania