

***PLEASE FORWARD - CALL FOR PAPERS***  
***SPECIAL ISSUE OF INTERNATIONAL JOURNAL***  
**COMPUTER-AIDED CIVIL AND INFRASTRUCTURE ENGINEERING**

*Founded in 1986*

Impact Factor: (Thomson Reuters Journal Citation Reports®): 11.775

Ranking in Civil Engineering 1 of 136;

Ranking in Construction & Building Technology 1 of 66;

Ranking in Transportation Science and Technology 1 of 38;

Ranking Computer Science, Interdisciplinary Application, 2 of 112

Editor-in-Chief: Hojjat Adeli

**Recent advances in vibration isolation/mitigation of structures and infrastructures**

Guest Editors:

Oreste S. Bursi, [oreste.bursi@unitn.it](mailto:oreste.bursi@unitn.it)

Osamu Furuya, [osamu.furuya@mail.dendai.ac.jp](mailto:osamu.furuya@mail.dendai.ac.jp)

Dimitrios Konstantinidis, [konstantinidis@berkeley.edu](mailto:konstantinidis@berkeley.edu)

Akira Wada, [wada@akira-wada.com](mailto:wada@akira-wada.com)

A special issue of CACAIE, now in its 36<sup>th</sup> year of publication, will be devoted to vibration isolation/mitigation of components, structures and infrastructure due but not limited to earthquake, wind, and traffic excitation. Research on one- and multi-dimensional vibration control represents a hotspot in structural engineering worldwide, recently producing a wealth of innovative mitigation devices and materials used in these devices. Above all, the enhancement of the isolation/mitigation performance of devices in each direction, including relevant materials, still represents a challenging issue. Along this main vein, low-cost composites, metamaterials or long structures and infrastructures with repetitive units are emerging in engineering applications for technological and economical reasons. In particular, both metamaterials, i.e. engineered composite periodic structures with favorable properties at low and ultra-low frequencies, and typical repetitive (periodic) structures as bridges, viaducts, tunnels and pipelines have become a subject of active research. In recent years, low-cost composite-material devices have emerged that leverage unique material and geometric nonlinearities to tailor the device's mechanical response. Therefore, recent innovations and advances in computational algorithms and methodologies for analysis and design of ingenious components and systems for vibration isolation/mitigation are present in the specialized literature. As a result, topics of interest include but are not limited to:

- 1) Vibration mitigation/isolation materials/composites
- 2) Novel metamaterials for vibration isolation/mitigation
- 3) Novel metamaterials exploiting nonlinearities
- 4) One- and multi-dimensional vibration isolation/mitigation
- 5) Vibration mitigation/isolation devices used for structures or nonstructural components (e.g. equipment)
- 6) Vibration mitigation/isolation devices adopted in infrastructures

The journal is primarily interested in original research papers describing **novel computational algorithms, models, and methodologies**. Papers describing computer programs or software systems or application of existing methodologies are not suitable. Straightforward applications of neural network, genetic algorithm or other widely-used algorithms are also not suitable. Please inform the guest editors and the Editor-in-Chief about your intention to submit a manuscript for possible publication in the special issue as soon as possible and email all of the following in the format requested to the Editor-in-Chief with cc to Guest Editors by **December 15, 2021**:

- 1) A statement that this manuscript is your “*original unpublished work and the manuscript or any variation of it has not been submitted to another publication previously.*” This journal does not consider papers rejected by other journals. You may request an exception to this policy but must submit ALL the correspondence and reviews received from the journal that rejected your paper.
- 2) The pdf file of your paper prepared in double-column according to the attached journal template. This will be used to determine the length of your paper as journal pages which is generally limited to 16 journal pages. There is a charge of \$250 per page for extra pages beyond 16 pages.
- 3) Editable Word or Latex files of your paper prepared in double-column according to the attached journal template.
- 4) A separate document explaining
  - the computational novelty of the paper beyond the published literature
  - what significant real-life civil/infrastructure engineering problem the research is addressing, and
  - significant finding/discovery of the research.
- 5) The names, affiliations, **h-index** from either Web of Science or Google Scholar Citations, and full contact information including email addresses of six to ten leading researchers as determined by publication of high-impact journal articles in the subject area of the paper outside of your circle/region as a Word file. They should not be your advisor, advisee, research sponsor, or research collaborator. They can include senior researchers cited in your paper. I may choose some of the reviewers among them. Please disclose potential conflicts of interest if any. It is natural to presume that any researcher knows the leading researchers in his/her field of study (they are often cited in the paper) (**List A**).
- 6) Who are the top 10 researchers in the world in the subject of the paper as determined by publication of impactful journal articles in the subject area of the paper? Please provide their name, affiliation, email address, and **h-index** from either Web of Science or Google Scholar Citations as a Word file (List B). This will indicate whether the authors are familiar with the latest development in the field and their paper extends the state-of-the-art.
- 7) The attached Conscientious Reviewer form for each author (except students) as a Word file. Journal contributors commit to provide detailed reviews for papers submitted to the journal as the journal reviewers are often chosen among contributors to the journal (they become a member of the *Society of CACAIE*). This is how thoughtful and detailed reviews are obtained in a timely fashion.
- 8) A Similarity Report using iThenticate or other Similarity Checking software where the similarity to any other archival publication is indicated as a percentage. The similarity to any other archival source should be less than 1%.
- 9) A confirmation to pay \$350 per figure for figures that must be printed in color in order to convey the intended information unambiguously.

#### **Guest Editors:**

##### **Prof. Oreste E. Bursi**

Head of the Research Group Hazard Mitigation, Structural Dynamics and Control,  
<http://r.unitn.it/en/dicam/nhmsdc>, Department of Civil, Environmental and Mechanical Engineering, University of Trento, Via Mesiano, 77, 38123 Trento, Italy. E-mail: [oreste.bursi@unitn.it](mailto:oreste.bursi@unitn.it)

##### **Prof. Osamu Furuya**

Division of Mechanical Engineering  
School of Science and Engineering  
Vice Director of the centre, Seismic safety research centre  
Tokyo Denki University  
E-mail: [osamu.furuya@mail.dendai.ac.jp](mailto:osamu.furuya@mail.dendai.ac.jp)

##### **Prof. Dimitrios Konstantinidis**

Structural Engineering, Mechanics and Materials  
Department of Civil and Environmental Engineering  
University of California, Berkeley  
Email: [konstantinidis@berkeley.edu](mailto:konstantinidis@berkeley.edu), <https://ce.berkeley.edu/people/faculty/konstantinidis>

**Prof. Akira Wada**

Professor Emeritus

Tokyo Institute of Technology

President of Japan Society of Seismic Isolation

Email: [wada@akira-wada.com](mailto:wada@akira-wada.com), [http://akira-wada.com/01\\_bio/bio01\\_eng.html](http://akira-wada.com/01_bio/bio01_eng.html)

**Editor-in-Chief:**

Prof. H. Adeli, The Ohio State University, Email: [Adeli.1@osu.edu](mailto:Adeli.1@osu.edu).