Accepted Manuscript

Title: Post-buckling response of non-uniform cross-section bilaterally constrained beams

Author: Pengcheng Jiao Wassim Borchani Hassene Hasni Amir. H. Alavi Nizar Lajnef



 PII:
 S0093-6413(16)30200-2

 DOI:
 http://dx.doi.org/doi:10.1016/j.mechrescom.2016.09.012

 Reference:
 MRC 3117

To appear in:

Received date:	15-3-2016
Revised date:	27-9-2016
Accepted date:	29-9-2016

Please cite this article as: Jiao, Pengcheng, Borchani, Wassim, Hasni, Hassene, Alavi, Amir.H., Lajnef, Nizar, Post-buckling response of non-uniform cross-section bilaterally constrained beams.Mechanics Research Communications http://dx.doi.org/10.1016/j.mechrescom.2016.09.012

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Highlights

- Energy harvesting and sensing under quasi-static excitations are possible using controlled instabilities of buckled elements.
- Spacing between buckling-modes transitions cannot be controlled using a uniform-cross section single beam.
- A solution is to adopt a non-uniform, continuous or piecewise continuous, cross-section.
- Spacing between snap-through transitions can be controlled by tuning the shape and the geometry dimensions of the beam.

Download English Version:

https://daneshyari.com/en/article/5018693

Download Persian Version:

https://daneshyari.com/article/5018693

Daneshyari.com