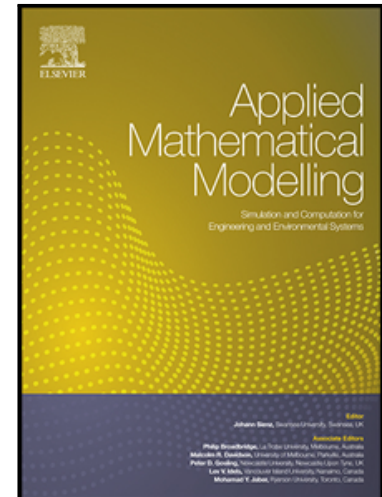


## Accepted Manuscript

A comprehensive study on the functionally graded piezoelectric energy harvesting from vibrations of a graded beam under travelling multi-oscillators

M. Heshmati , Y. Amini

PII: S0307-904X(18)30442-6  
DOI: <https://doi.org/10.1016/j.apm.2018.09.002>  
Reference: APM 12454



To appear in: *Applied Mathematical Modelling*

Received date: 30 August 2017  
Revised date: 19 August 2018  
Accepted date: 4 September 2018

Please cite this article as: M. Heshmati , Y. Amini , A comprehensive study on the functionally graded piezoelectric energy harvesting from vibrations of a graded beam under travelling multi-oscillators, *Applied Mathematical Modelling* (2018), doi: <https://doi.org/10.1016/j.apm.2018.09.002>

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.

## Highlights

- It is seen, the maximum magnitude of voltage increases by decreasing in time lags between each moving oscillators.
- It is concluded that the produced voltage increases when the power index  $n$  increases.
- It is concluded that the lower time lags give the voltage signal with higher amplitude.
- It is found, the produced power increases with decrease of time lag.
- It is observed, an increase in the natural frequency of oscillator, results in a decrease of harvested power.

Download English Version:

<https://daneshyari.com/en/article/11026496>

Download Persian Version:

<https://daneshyari.com/article/11026496>

[Daneshyari.com](https://daneshyari.com)