

Accepted Manuscript

Optimal control of stretching process of flexible solar arrays on spacecraft
based on a hybrid optimization strategy

Qijia Yao, Xinsheng Ge

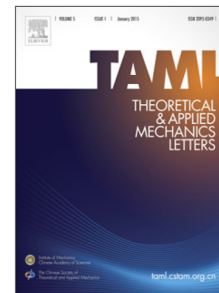
PII: S2095-0349(17)30070-3
DOI: <http://dx.doi.org/10.1016/j.taml.2017.05.002>
Reference: TAML 166

To appear in: *Theoretical & Applied Mechanics Letters*

Received date : 14 February 2017
Revised date : 25 April 2017
Accepted date : 18 May 2017

Please cite this article as: Q. Yao, X. Ge, Optimal control of stretching process of flexible solar arrays on spacecraft based on a hybrid optimization strategy, *Theoretical & Applied Mechanics Letters* (2017), <http://dx.doi.org/10.1016/j.taml.2017.05.002>

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

- The optimal control problem of stretching process of solar arrays on spacecraft is discussed.
- The elastic deformation of flexible solar arrays is described approximately by the assumed mode method.
- A hybrid optimization strategy based on Gauss pseudospectral method and direct shooting method is proposed.

Download English Version:

<https://daneshyari.com/en/article/7196537>

Download Persian Version:

<https://daneshyari.com/article/7196537>

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