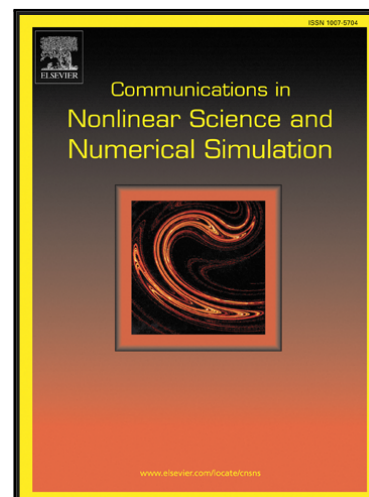


Accepted Manuscript

Fractional characteristic times and dissipated energy in fractional linear viscoelasticity

Natalia Colinas Armijo, Mario Di Paola, Francesco P. Pinnola

PII: S1007-5704(16)00005-8
DOI: [10.1016/j.cnsns.2016.01.003](https://doi.org/10.1016/j.cnsns.2016.01.003)
Reference: CNSNS 3734



To appear in: *Communications in Nonlinear Science and Numerical Simulation*

Received date: 5 August 2015
Revised date: 26 November 2015
Accepted date: 5 January 2016

Please cite this article as: Natalia Colinas Armijo, Mario Di Paola, Francesco P. Pinnola, Fractional characteristic times and dissipated energy in fractional linear viscoelasticity, *Communications in Nonlinear Science and Numerical Simulation* (2016), doi: [10.1016/j.cnsns.2016.01.003](https://doi.org/10.1016/j.cnsns.2016.01.003)

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

- Viscoelastic is modeled through fractional stress-strain relationships.
- Elastic and viscous contribution in fractional viscoelasticity cannot be dissociated.
- Fractional characteristic times defined to isolate elastic and viscous contribution.
- Classical models and dissipated energy to calculate fractional characteristic times.

Download English Version:

<https://daneshyari.com/en/article/7155193>

Download Persian Version:

<https://daneshyari.com/article/7155193>

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