

Accepted Manuscript

Thermoelastic damping in circular cross-section micro/nanobeam resonators with single-phase-lag time

Hongyue Zhou , Pu Li , Yuming Fang

PII: S0020-7403(18)30070-5
DOI: [10.1016/j.ijmecsci.2018.05.024](https://doi.org/10.1016/j.ijmecsci.2018.05.024)
Reference: MS 4334



To appear in: *International Journal of Mechanical Sciences*

Received date: 8 January 2018
Revised date: 26 April 2018
Accepted date: 9 May 2018

Please cite this article as: Hongyue Zhou , Pu Li , Yuming Fang , Thermoelastic damping in circular cross-section micro/nanobeam resonators with single-phase-lag time, *International Journal of Mechanical Sciences* (2018), doi: [10.1016/j.ijmecsci.2018.05.024](https://doi.org/10.1016/j.ijmecsci.2018.05.024)

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

- Thermoelastic damping (TED) is affected by the non-Fourier effect significantly.
- A multiple-peak phenomenon of TED spectrum is observed at ultrahigh frequencies.
- The multiple-peak phenomenon depends on the equilibrium temperature.
- Heating and cooling occur simultaneously in the vibrating beam.

Download English Version:

<https://daneshyari.com/en/article/7173727>

Download Persian Version:

<https://daneshyari.com/article/7173727>

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