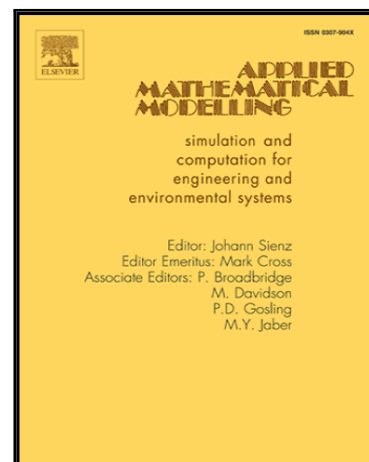


Accepted Manuscript

Modelling heat transport in nanofluids with stagnation point flow using fractional calculus

Mingyang Pan, Liancun Zheng, Fawang Liu, Xinxin Zhang

PII: S0307-904X(16)30303-1
DOI: [10.1016/j.apm.2016.05.044](https://doi.org/10.1016/j.apm.2016.05.044)
Reference: APM 11197



To appear in: *Applied Mathematical Modelling*

Received date: 20 February 2016
Revised date: 11 May 2016
Accepted date: 25 May 2016

Please cite this article as: Mingyang Pan, Liancun Zheng, Fawang Liu, Xinxin Zhang, Modelling heat transport in nanofluids with stagnation point flow using fractional calculus, *Applied Mathematical Modelling* (2016), doi: [10.1016/j.apm.2016.05.044](https://doi.org/10.1016/j.apm.2016.05.044)

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

- Boundary layer flow and heat transfer of power-law nanofluids over a porous sheet are studied.
- Partial fractional derivative is used to characterize the anomalous heat diffusion of nanofluids.
- Four types of nanoparticles are considered with the carboxymethyl cellulose and water miscible liquids.
- Similarity solutions are obtained and the associated characteristics are analyzed in detail.

Download English Version:

<https://daneshyari.com/en/article/5471453>

Download Persian Version:

<https://daneshyari.com/article/5471453>

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