

# Significance of multiple solutions on the dynamics of ethylene glycol conveying gold and copper nanoparticles on a shrinking surface

*Elsayed Mohamed Tag Eldin*, *Muhammad Naveed Khan*<sup>1</sup>,  
*www.frontiersin.org* *Sawsan Alhowaity*<sup>2</sup>, *www.frontiersin.org* *Zhentao Wang*<sup>3</sup>,  
*www.frontiersin.org* *Aisha M. Alqahtani*<sup>4\*</sup>, *www.frontiersin.org* *Elsayed Tag-eldin*<sup>5</sup>  
and *www.frontiersin.org* *Mansour F. Yassen*<sup>6</sup>

## Abstract

[https://www.frontiersin.org/articles/10.3389/fphy.2022.1014644/full?utm\\_source=dlvr.it&utm\\_medium=twitter](https://www.frontiersin.org/articles/10.3389/fphy.2022.1014644/full?utm_source=dlvr.it&utm_medium=twitter)

*Frontiers in Physics* 2022, October