

Review of: "Periodic second-order systems and coupled forced Van der Pol oscillators"

Hany Bauomy¹

1 Prince Sattam bin Abdulaziz University

Potential competing interests: No potential competing interests to declare.

Review report

Periodic second-order systems and coupled forced Van der Pol oscillators

In this study, the existence and localization results for periodic solutions of second-order non-linear coupled planar systems are presented, without requiring periodicity for the nonlinearities. The arguments for the existence tool are based on a variation of the Nagumo condition and Topological Degree Theory. The localization tool is based on a technique of orderless upper and lower solutions that involves functions with translations. The authors apply our result to a system of two coupled Van der Pol oscillators with a forcing component.

The paper is good, but needs more comments as follows:

This paper needs major comments:

- 1. The paper has typos; kindly proofread the paper and check for grammar and spelling mistakes.
- 2. Please add more effective diagrams to show what is new in your paper.
- 3. What is the novelty of this study? Please explain.
- 4. Where is the comparison between your paper and recent papers in the same methodology that you studied?

Thanks

Qeios ID: YH0RUS · https://doi.org/10.32388/YH0RUS