Review of: "Dynamic structure factors and equation of state of fluid iron under Earth's core condition"

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Potential competing interests: No potential competing interests to declare.

1. The Introduction is week, at the end of the introduction, please expound on the new aspect of your work.2. Rephrase the last paragraph of introduction with novelty and objectives clear and concise.One fact that is common in almost all the quality publications within our field is the fact that they present the analysis of results and discussion of results separately. Meanwhile, the best practice is to build the discussion of results on the results that have been analysed. This will guide the authors to present the best and accurate results capable to announce the title and lead to conclusive facts in the next section of the manuscript. But, permit me to ask you a question. Do you know that the analysis of results is quite different from the discussion of results? Comment: Divide the third section into two subsections. Ensure that the revised version of the manuscript contains3. Analysis of Results4. Discussion of Results5. Elaboration of the method used.6. Validation of the method by incorporating the regression analysis.Discussions should be elaborated for each physical parameter with physical meaning.The literature review must give a critical assessment of the existing state and explicitly indicate the gaps that the current work tries to fill. Gaps can be filled with few works such as1. International Communications in Heat and Mass Transfer 126 (2021) 105436. Fractional Analysis of MHD Boundary Layer Flow over a Stretching Sheet in Porous Medium: A New Stochastic Method, Journal of Function Spaces, Volume 2021, Article ID 5844741, 19 pages.3.Falkner-Skan Equation with Heat Transfer: A New Stochastic Numerical Approach, Mathematical Problems in Engineering Volume 2021, Article ID 3921481, 17 pages.4. A Levenberg-Marquardt backpropagation method for unsteady squeezing flow of heat and mass transfer behavior between parallel plates, Advances in Mechanical Engineering, Advances in Mechanical Engineering, 2021, Vol. 13(10) 1-15.5. MHD Boundary Layer Flow over a Stretching Sheet: A New Stochastic Method, Mathematical Problems in Engineering, Volume 2021, Article ID 9924593, 26 pages.6.Levenberg-Marquardt Backpropagation for Numerical Treatment of Micropolar Flow in a Porous Channel with Mass Injection, Complexity, Volume 2021, Article ID 5337589, 12 pages.7. Neuro-Computing for Hall Current and MHD Effects on the Flow of Micro-Polar Nano-Fluid Between Two Parallel Rotating Plates, Arabian Journal for Science and Engineering, https://doi.org/10.1007/s13369-022-06925-z.8.Intelligent Computing of Levenberg-Marquard Technique Backpropagation Neural Networks for Numerical Treatment of Squeezing Nanofluid Flow between Two Circular Plates, Mathematical Problems in Engineering Volume 2022, Article ID 9451091, 11 pages.9. Heat Transfer Impacts on Maxwell Nanofluid Flow over a Vertical Moving Surface with MHD Using Stochastic Numerical Technique via Artificial Neural Networks. Coatings 2021, 11, 1483. https://doi.org/ 10.3390/coatings11121483.10 Levenberg-Marquardt Backpropagation for Numerical Treatment of Micropolar Flow in a Porous Channel with Mass Injection, Complexity Volume 2021, Article ID 5337589, 12 pages12. Numerical treatment of squeezed MHD Jeffrey fluid flow with Cattaneo Chrisstov heat flux in a

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