# Review of: "Einstein-AdS gravity coupled to nonlinear electrodynamics, magnetic black holes, thermodynamics in an extended phase space and Joule—Thomson expansion"

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Potential competing interests: No potential competing interests to declare.

The authors have investigated the Einstein's gravity with negative cosmological constant coupled to nonlinear electrodynamics black holes. Various properties like Thermodynamics and phase transitions, Gibbs free energy and heat capacity, and The Joule—Thomson expansion of magnetically charged black holes in Anti-de Sitter space-time are investigated. The manuscript may be publishable if the authors would fully consider the following points:

1. It is necessary to clarify the motive behind this work and whether there is an experimental aspect to it and the importance of physical applications in the field of black hole physics should also be shown.?
2. As the authors talk about the black hole horizons, I ask the authors to draw the orbit of light near the black hole solution they found?.
3. What are the physical reasons for specifically choosing nonlinear electrodynamics black holes inEinstein's gravity, and why not in another theory of gravity?, As there are some other nonlinear electrodynamics black holes?
4. What specific information can be obtained from the graph in**Figure 7.**
5. Authors have included some detailed literature about nonlinear electrodynamics black holes, but some important recent literature is still missing regarding nonlinear electrodynamics black holes. As an example “Chinese journal of Physics 83, 664-679 (2023)”, any some others.