

# Review of: "The edge rings of compact graphs"

Ahmed El-mesady<sup>1</sup>

<sup>1</sup> Menoufia University

**Potential competing interests:** No potential competing interests to declare.

Throughout my reading, I met some typos. The authors are suggested to check them carefully to improve the quality of the paper.

A professional proofreading revision is necessary to correct language errors. Some sentences are not clear, it will be better if the author reads the paper with more concentration.

To improve the clarity and effectiveness of the abstract, the authors should consider the following suggestions: (a) Clearly state the overall purpose of the paper and the research problems investigated. This can be achieved in one or two concise sentences. (b) Provide a basic design of the study, including the methods, and analytical techniques used. This will help readers understand the scope and rigor of the study. (c) provide a summary of your interpretations or implications of the study's findings. This will help readers understand the significance and relevance of the research.

The Introduction should make a compelling case for why the study is useful along with a clear statement of its novelty or originality by providing relevant information and providing answers to basic questions such as: What is already known in the open literature? What is missing (i.e., research gaps)? What needs to be done, why and how? Clear statements of the novelty of the work should also appear briefly in the Abstract and Conclusions sections.

Mathematical formulas should include punctuation symbols.

There is a need to elaborate on motivation.

It must be made very obvious how original the paper is.

Check the similarity index of manuscript.

Abstract should be rewritten and extended so that it can reflect the overall contain of the paper.

Put the results and discussions in two separate sections.

Comparison with existing works: To establish the novelty and significance of the proposed work, it is crucial to compare it with existing works in the field. The authors should provide a comprehensive literature review, highlighting the advantages and limitations of previous works, and clearly demonstrate how their work fills the existing research gap. Such a comparison will enhance the overall contribution and value of the paper.

Describe how the suggested approach is superior to other ones currently in use.

Polish merits to your proposed method and what are the limitations of the method. The reader should now be better able to comprehend and be aware of upcoming efforts.

Authors should add a conclusion section with a focus on both impact and insights of the manuscript. Clearly state your unique research contributions in the conclusion section and point out potential future work directions.

The authors should give recent developments by adding more recent references, such as

“On infinite circulant-balanced complete multipartite graphs decompositions based on generalized algorithmic approaches”, “On Bipartite Circulant Graph Decompositions Based on Cartesian and Tensor Products with Novel Topologies and Deadlock-Free Routing”, “Decompositions of circulant-balanced complete multipartite graphs based on a novel labelling approach”, “A novel approach for cyclic decompositions of balanced complete bipartite graphs into infinite graph classes”, “Complete Multipartite Graphs Decompositions Using Mutually Orthogonal Graph Squares”, “A novel application on mutually orthogonal graph squares and graph-orthogonal arrays”, “On graph-transversal designs and graph-authentication codes based on mutually orthogonal graph squares”, “Generalization of MacNeish’s Kronecker product theorem of mutually orthogonal Latin squares”.