



SDI Review Form 1.6

Journal Name:	Current Journal of Applied Science and Technology
Manuscript Number:	Ms_CJAST_38488
Title of the Manuscript:	Validation of the Area1 of Approximate Entropy (a1ApEn) in Empirical Data of Heart Rate
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	Line 27-30, please give reference or foundation, why does the preceding validation using simulated data? The conclusion is so simple, I suggest the author may improve it and add some materials in it. I think the author may compare the method in the manuscript and other method in dealing with the same issue. The author may increase the reference, or other expression to show the superiority of this work. In the manuscript, many data are presented in the table format, however, I suggest some figures may be added, such as the original data, the data after processing, and so on. The application of approximate entropy or other similar methods may be improved in the revised manuscript. Some reference may be added, such as: 1. Yao Ping, Zhou Kang, Zhu Qiang, "Quantitative Evaluation Method of Arc Sound Spectrum Based on Sample Entropy", Mechanical Systems and Signal Processing, vol: 92, August 2017, pp:379-390 2. Yao Ping, Xue JiaXiang, Zhou Kang, Wang XiaoJun, "Sample Entropy-Based Approach to Evaluate the Stability of Double-Wire Pulsed MIG Welding", Mathematical Problems in Engineering, vol. 2014, pp: 869631.1-8 3. Yao Ping, Zhou Kang, "Application of Short Time Energy Analysis in Monitoring the Stability of Arc Sound Signal", Measurement, vol: 105, July 2017, pp: 98-105	Now justified in the text. We agree that the conclusion is simple, but it pinpoints the goal of the study and highlights the validation we seek for the a1ApEn. In addition, it is not our intention to address controversial topics of HRV/C issues. Our goal, here, was not to show whether a1ApEn is superior to other methods or not. This was done in two previous papers (refs. [7] and [19]). Our aim was simply to show that the tool can be safely applied to analyse empirical data, and we compare its results with those from heart rate variability estimators. We suppressed the original Table 6 and added a Figure to illustrate the impact of phase shuffling. We think that the original data would be much less interesting to a visual approach to the goal of the study.
Minor REVISION comments		
Optional/General comments	The English may be improved, some sentence is so long and hard to understand, please shorten them, such as Line 21-24.	This specific sentence was modified. English was revised one more time. Some errors were detected and corrected.