September 14, 2018

Editorial Department of Ultrasound in Medicine and Biology

Dear Editor,

I am submitting a manuscript titled “Acoustic Shadow Detection: Study and Statistics of B-Mode and Radiofrequency Data” for consideration of publication in Ultrasound in Medicine and Biology.

The manuscript has not been published or submitted for publication elsewhere. We have no conflicts of interest to disclose. All authors have approved the submitted version of the manuscript.

In the manuscript, we present results of a clinical study specifically designed to observe acoustic shadows from different anatomy and transducers. This results in data set with images containing acoustic shadows that are not specific to a single scenario. We show that acoustic shadows can be characterized using both radiofrequency and brightness mode data. We investigate the statistical differences between shadow and non-shadow regions. With this characterization, we present two automated shadow detection methods that can detect shadows with an accuracy comparable to the gold standard of manual detection. The detection methods, contrary to previous methods, and does not require empirical parameter tuning to detect shadows in different anatomy or transducers as it has been designed to be versatile and usable by novices.

The following reviewers are suggested based on expertise relevant to the content of the manuscript:

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Thank you for your consideration.

Sincerely,

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