



# Corrigendum: Spectral Entropy Based Neuronal Network Synchronization Analysis Based on Microelectrode Array Measurements

Fikret E. Kapucu<sup>1,2\*</sup>, Inkeri Välikki<sup>2</sup>, Jarno E. Mikkonen<sup>3</sup>, Chiara Leone<sup>4</sup>, Kerstin Lenk<sup>2</sup>, Jarno M. A. Tanskanen<sup>2</sup> and Jari A. K. Hyttinen<sup>2</sup>

<sup>1</sup> Department of Pervasive Computing, Tampere University of Technology, Tampere, Finland, <sup>2</sup> Computational Biophysics and Imaging Group, Department of Electronics and Communication Engineering, BioMediTech, Tampere University of Technology, Tampere, Finland, <sup>3</sup> Department of Psychology, Center for Interdisciplinary Brain Research, University of Jyväskylä, Jyväskylä, Finland, <sup>4</sup> Department of Management and Production Engineering, Politecnico di Torino, Torino, Italy

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## A Corrigendum on

### Spectral Entropy Based Neuronal Network Synchronization Analysis Based on Microelectrode Array Measurements

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### \*Correspondence:

Fikret E. Kapucu  
emre.kapucu@tuni.fi

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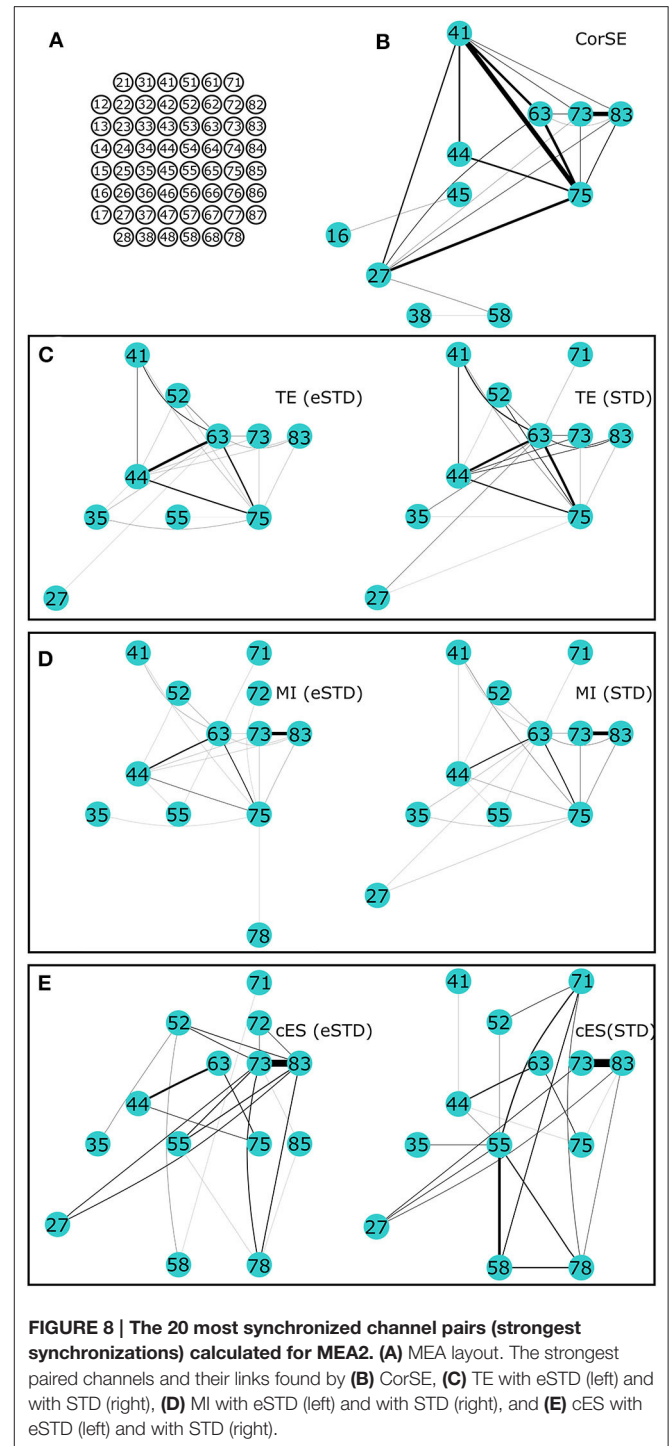
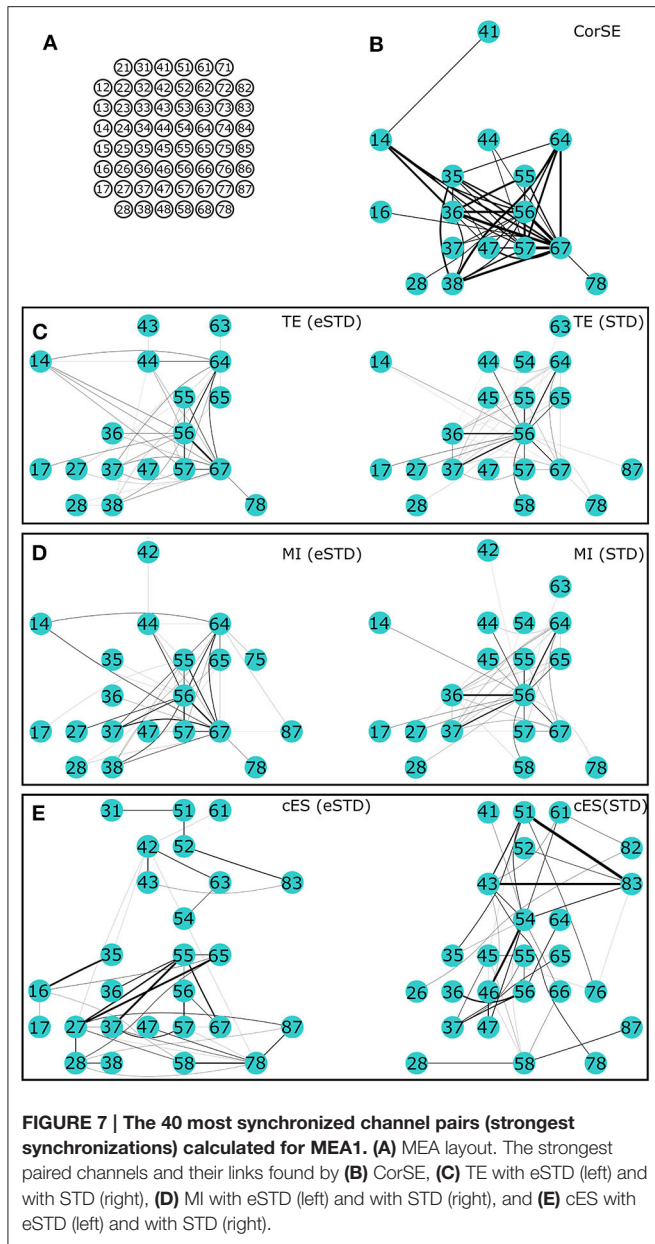
Kapucu FE, Välikki I, Mikkonen JE, Leone C, Lenk K, Tanskanen JMA and Hyttinen JAK (2020) Corrigendum: Spectral Entropy Based Neuronal Network Synchronization Analysis Based on Microelectrode Array Measurements. *Front. Comput. Neurosci.* 14:586506. doi: 10.3389/fncom.2020.586506

In the original article, there was a mistake in the legend for **Figure 8** as published. The “MEA1” in the text was supposed to be “MEA2” in the legend. The corrected legend appears below.

Also, there was a mistake in **Figures 7 and 8** as published. The figures were not representing the text in the original publication. Since the text is written according to the published data (which can be easily confirmed by the original Figures 5 and 6), the data is not well-represented in the **Figures 7 and 8**. The thickness of lines between the nodes were plotted wrong. Otherwise all the channels and connections between those channels are correct, except for Figure 7E cES (eSTD) and Figure 8E cES(STD). The original Figure 7E cES (eSTD) and Figure 8E cES(STD) were possibly plotted from the wrong data. The corrected Figures are now representing the originally published data and the text without any mistakes. The corrected **Figures 7 and 8** appear below. The authors apologize for this error and state that this does not change the scientific conclusions of the article in any way, in fact the corrected Figures now firmly represent the results and conclusions presented in the original article.

Additionally, in the original article, there was an error. In the following sentence, the “CorSE” method should not be included:

“For MEA2, the highest synchronization was found between the channels 73 (7,3) and 83 (8,3) by CorSE, and the MI (with STD and eSTD) and cES (with STD and eSTD) methods (Figures 6B,D,E).”



A correction has been made to Results section, Sub-section MEA recordings, the second paragraph:

For MEA2, the highest synchronization was found between the channels 73 (7,3) and 83 (8,3) by MI (with STD and eSTD) and cES (with STD and eSTD) methods (Figures 6D,E).

Relatedly, the same error is seen also in Discussion. In the following sentence, the “CorSE” method for MEA2 should not be included:

“CorSE, and the mutual information and transfer entropy algorithms all found the same link as the most synchronized link for MEA1, whereas for MEA2, the same most synchronized link

was found by CorSE, and the mutual information and corrected event synchronization methods.”

A correction has been made to the Discussion section, the fourth paragraph:

CorSE, and the mutual information and transfer entropy algorithms all found the same link as the most synchronized

link for MEA1, whereas for MEA2, the same most synchronized link was found by the mutual information and corrected event synchronization methods.

The authors apologize for these errors and state that they do not change the scientific conclusions of the article in any way. The original article has been updated.

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