Special Issue

Advances in Multivariate Physiological Signal Analysis

Message from the Guest Editors

A physiological system is characterized by complex dynamics and nonlinear behavior as a result of its own structural organization and regulatory mechanisms. Moreover, the optimization of physiological states and functions passes through the continuous dynamic interaction of feedback mechanisms across different spatiotemporal scales.

For this reason, advanced multivariate signal analysis techniques could strongly improve the information acquired from physiological systems monitoring as a promising avenue to increase the knowledge on biological regulation in healthy and pathological states. Thanks to the latest advances in technology that have provided miniaturized and highly performance acquisition systems, a synchronized multichannel recording of multiple signals—even in wearable and wireless mode—is currently possible. This Special Issue on "Advances in Multivariate Physiological Signal Analysis" will, therefore, focus on original research papers and comprehensive reviews dealing with computational methodologies, processing of multivariate signals to quantify specific physiological states as well as linear and nonlinear interactions.

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Editor-in-Chief

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