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Fractional Vibrations: Theory and Applications

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Message from the Guest Editors

Dear Colleagues

Fractional vibrations have attracted interest from researchers in various fields, ranging from mechanical engineering to mechanics of materials. The topic of this Special Issue is the Theory and Applications of Fractional Vibrations, and its focus is two-fold: the theory of fractional vibrations, such as the responses and dynamics of fractional vibrators, and applications, such as theoretical explanations of the Rayleigh damping assumption or structure–fluid coupling vibrations.

Specifically, the goal of this Special Issue is to develop the theory and applications of fractional vibrations except conventional nonlinear ones. We are interested in mechanical engineering applications, and recent advances in the theory of fractional vibrations with a mathematics or mechanics approach.

High quality papers, including research articles and reviews, are invited in, among others, the following areas:

- Theory and applications of fractional vibrations.
- Fractional multi-degree-of freedom vibrations.
- Theoretical explanations of the Rayleigh damping assumption.

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Special Issue