





an Open Access Journal by MDPI

## **Magneto-Rheological Fluids**

Guest Editors:

Dr. Antonio Concilio

Dr. Salvatore Ameduri

Dr. Ignazio Dimino

Dr. Vikram G Kamble

Dr. Rosario Pecora

Deadline for manuscript submissions:

closed (20 September 2022)

## **Message from the Guest Editors**

Magneto-rheological fluids offer unique opportunities for adaptive structural systems capable modulating their response by properly modifying their stiffness and their damping. Since the related transformations occur at a rate well beyond the classical kHz magnitude, a sort of standard reference for structural systems bandwidth, they can suit the realization of adaptive control systems well for optimizing, for instance, impact energy diffusion, as for shock absorbers, landing gears, adaptive bumpers, and so on, or dynamic response by stiffness adjustment, useful for noise control, maneuver optimization, direction control, and so on. The evolution of MRF devices may be easily tracked on scientific literature ranging all along the last thirty years and more. The ambition of this Special Issue is instead to concentrate on the applications of this technology, pointing at its potentiality, and its limitations, trying to provide a reliable picture of the state of the art in terms of reliability and marketability of MRF-based devices.











an Open Access Journal by MDPI

### **Editor-in-Chief**

# **Prof. Dr. Giulio Nicola Cerullo**Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

## **Message from the Editor-in-Chief**

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

### **Author Benefits**

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), Inspec, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q2 (*Engineering, Multidisciplinary*) / CiteScore - Q1 (*General Engineering*)

#### **Contact Us**