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New Trends in Magnetic Bearings

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Message from the Guest Editors

Dear Colleagues,

Magnetic bearings are nowadays considered a mature technology that is gaining relevant attention in several industrial fields, thanks to numerous remarkable advantages. The number of applications exploiting this technology is continuously increasing, as is the development of novel layouts and actuation architectures. In this scenario, intense research efforts are currently dedicated to the investigation of new solutions, aimed at the optimization of some relevant aspects, such as the geometry and hardware component optimization, the combination of active and passive magnetic bearings, and the control strategies. This Special Issue is aimed at point out the emerging evolutions and new perspectives of this technology, encouraging original contributions related, but not limited to, the following topics:

- Active and passive magnetic bearings (for linear and rotating systems)
- Electrodynamic bearings
- Hardware components (sensors and power amplifiers)
- Power losses reduction
- Scaling issues
- Control strategies
- Touch-down bearings
- Materials
- Hardware reduction



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Special Issue



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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.

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