

Special Issue

Gas Bearings: Modelling, Design and Applications

Message from the Guest Editors

Gas bearings are essentially employed in two fields: very-high-speed applications and very-accurate-motion systems. Due to the low viscosity of air, they are appreciated for their low friction and wear but also because they are oil-free. Although extensive research has been performed since the 1960s, there is currently an increasing demand to enhance the performance and accuracy of gas bearings. This Special Issue aims to discuss recent advances in gas bearings with a particular focus on numerical models, design processes, and experimental issues. We invite authors to contribute original research articles, as well as review articles, that will contribute to the area of gas bearings. Potential topics include, but are not limited to:

- aerostatic and hybrid bearings;
- foil bearings, pivoted pad journal bearings, and other aerodynamic bearings;
- methods for enhancing the stiffness and/or stability of gas bearings;
- experimental identification and modelling of gas bearings;
- reviews on one or more of the above-mentioned topics.

Guest Editors

Prof. Dr. Terenziano Raparelli

Dr. Federico Colombo

Prof. Andrea Trivella

Dr. Luigi Lentini

Deadline for manuscript submissions

closed (20 December 2021)



Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.3



mdpi.com/si/53437

Applied Sciences
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
appls@mdpi.com

[mdpi.com/journal/
appls](https://mdpi.com/journal/appls)





Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.3



[mdpi.com/journal/
applsci](https://mdpi.com/journal/applsci)



About the Journal

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.

Editor-in-Chief

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

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, CAPIus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)