Special Issue

Contact Mechanics, Wear and Acoustic Waves

Message from the Guest Editor

Since the pioneering works in the 1970s, acoustic waves have been widely used to investigate contact mechanics and wear. Acoustic waves enable the non-destructive evaluation of interfaces, through the transmission of waves across or the propagation of waves along contacting surfaces. The wide range of frequencies makes it possible to probe structures at millimeter to nanometer scales. Such approaches find applications in various fields, from the evaluation of rolling contacts in wheel–rail interactions, non-linear propagation in the vicinity of cracks, or the investigation of biological implants and cell adhesion. We are inviting the submission of manuscripts to this Special Issue on "Wear, Contact Mechanics and Acoustic Waves." This Special Issue aims to cover non-destructive testing, non-linear acoustics, guided and interfacial waves, biological applications, modelling, and relevant multiphysics. We welcome research articles as well as review articles on the significant recent progress in these fields.

- Tribology
- Contact mechanics
- Ultrasound
- Non-linear acoustics
- Surface, interfacial, and guided waves
- Friction
- Lubrication

Guest Editor

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closed (30 April 2021)

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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.

Editor-in-Chief

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