nanomaterials

IMPACT FACTOR 4.3

Indexed in: PubMed

CITESCORE 9.2

an Open Access Journal by MDPI

Tribological Properties of Nanoparticles

Guest Editor:

Prof. Dr. Fabrice Dassenoy
Laboratory of Tribology and System Dynamics, Ecole Centrale de Lyon, University Lyon, ENISE, ENTPE, CNRS UMR5513, 69134 Ecully, France

Deadline for manuscript submissions:
closed (31 December 2021)

Message from the Guest Editor

There has been a growing interest in nanoparticles for tribological applications. Studies on this topic have shown the remarkable lubricating properties, viz. friction-reducing and anti-wear, of certain nanoparticles, especially when used as lubricant additives. Among the nanoparticles with proven tribological performance are carbon nanotubes, carbon onions, nanodiamonds, graphene, BN/ZrO_2/TiO_2 nanoparticles, inorganic fullerene-like (IF) metal disulfides (IF-MoS_2, IF-WS_2) nanoparticles, etc. All these nanoparticles have been the subject of detailed investigation, and many key issues have been tackled, such as the conditions leading to these properties, the influence of parameters and morphology of the nanoparticles on their tribological properties/lubrication mechanisms, and the interactions between the particle. In order to answer such questions, state-of-the-art characterization techniques are required, often in situ.

For further reading, please follow the link to the Special Issue Website at: http://www.mdpi.com/si/265035

Prof. Dr. Fabrice Dassenoy

Guest Editor

nanomaterials

IMPACT FACTOR 4.3 | Indexed in: PubMed | CITESCORE 9.2

an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones
School of Geography, Earth and Environmental Science, University of Birmingham, Birmingham B15 2TT, UK

Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal–organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

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), PubMed, PMC, CAPlus / SciFinder, Inspec, and other databases.
Journal Rank: JCR - Q2 (Physics, Applied) / CiteScore - Q1 (General Chemical Engineering)

Contact Us

Nanomaterials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/nanomaterials
nanomaterials@mdpi.com
𝕏@nano_mdpi