



## Physical Virology - Viruses at Multiple Levels of Complexity

Guest Editors:

**Dr. Roya Zandi**

Department of Physics and  
Astronomy, University of  
California, Riverside, CA, USA

**Dr. Michael F. Hagan**

Physics and Biological Physics,  
Martin A. Fisher School of  
Physics, Brandeis University,  
Waltham, USA

**Dr. Charlotte Uetrecht**

Heinrich Pette Institute, Leibniz  
Institute for Experimental  
Virology, CSSB and European  
XFEL GmbH, Hamburg, Germany

Deadline for manuscript  
submissions:

**closed (10 July 2023)**

### Message from the Guest Editors

This Special Issue will present works by researchers with scientific expertise in virology, chemistry, material science, mathematics, physics, and engineering who share a common desire to (1) understand the biophysical mechanisms that enable and regulate viral lifecycles, (2) use this knowledge to develop and engineer novel nanotechnology platforms based on viral particles or other self-assembling structures, with applications including biomimetic materials and optoelectronics, and (3) broaden physical virology to leverage recent advances in cell biology and protein design. The COVID-19 pandemic has highlighted the need for these cross-disciplinary approaches to understand viral biology, predict their global spread and impact, and generate the fundamental knowledge that provides the foundation for the development of new treatments.

This Special Issue is dedicated to the GRC Physical Virology in January 2023. All the attendees of the meeting will be entitled to a special 600 CHF discount on the article processing charge. We have a possibility to select a few papers to be published free of charge based on the quality and novelty of the papers.





an Open Access Journal by MDPI

## Editor-in-Chief

### Dr. Eric O. Freed

HIV Dynamics and Replication  
Program, Center for Cancer  
Research, National Cancer  
Institute, Frederick, MD 21702-  
1201, USA

## Message from the Editor-in-Chief

You are invited to contribute a research article or a comprehensive review for consideration and publication in *Viruses* (ISSN 1999-4915). *Viruses* is published in open access format—research articles, reviews and other content are released on the internet immediately after acceptance. The scientific community and the general public have unlimited free access to the content as soon as it is published. As an open access journal, *Viruses* is supported by the authors or their institutes by payment of article processing charges (APC) for accepted papers. We would be pleased to welcome you as one of our authors.

## 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, MEDLINE, PMC, Embase, PubAg, and other databases.**

**Journal Rank:** JCR - Q2 (Virology) / CiteScore - Q1 (Virology/Infectious Diseases)

## Contact Us

---

Viruses Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/viruses](http://mdpi.com/journal/viruses)  
[viruses@mdpi.com](mailto:viruses@mdpi.com)  
[X@VirusesMDPI](https://twitter.com/VirusesMDPI)