

## Special Issue

# The Use of Nanoparticles in Vaccine Development

### Message from the Guest Editor

Vaccines have been a cornerstone of public health, successfully controlling and eradicating infectious diseases around the world. However, despite their effectiveness, certain challenges persist, including weak immunogenicity, in vivo instability, toxicity concerns, and the need for multiple administrations. Recent advancements in nanotechnology offer potential solutions to address these limitations and revolutionize vaccine development. Potential topics for this Special Issue may include, but are not limited to, the following:

- The design and engineering of nanoparticle-based vaccine delivery systems;
- Immune responses elicited by nanoparticle vaccines;
- Novel adjuvants and formulations using nanoparticles;
- The biocompatibility and safety assessment of nanoparticle vaccines;
- Nanoparticles used for targeted vaccine delivery and enhanced antigen presentation;
- The stability and storage of nanoparticle-based vaccines;
- Clinical trials and translational studies of nanoparticle vaccines;
- The comparative analysis of nanoparticle vaccines with conventional vaccine approaches;
- Nanoparticles in the development of vaccines against emerging infectious diseases.

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### Guest Editor

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### Deadline for manuscript submissions

closed (31 August 2024)



## Vaccines

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## About the Journal

### Message from the Editor-in-Chief

*Vaccines* (ISSN 2076-393X), founded in 2013, now has a firm history of publishing peer-reviewed, state-of-the-art research papers on vaccines and vaccination in the broadest sense. Areas covered include, but are not limited to, novel and emerging vaccine technologies, building on in-depth knowledge of what constitutes a protective immune response. These can be new vaccines for old diseases, or old vaccines for new diseases. Vaccines against cancer and autoimmune diseases explicitly are also within the scope of the journal. Because public opinion and even government policies towards vaccines and vaccination have changed, vaccine policy and public health issues are major concerns. Climate change will also have an impact on the spread of infectious diseases, and thus also on vaccine and vaccination policies worldwide.

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### Editor-in-Chief

Prof. Dr. Ger Rijkers

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#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18.1 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2025).