



***viruses***



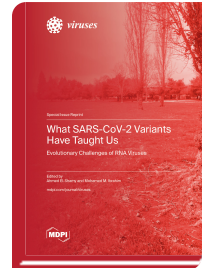
*Special Issue Reprint*

## **What SARS-CoV-2 Variants Have Taught Us: Evolutionary Challenges of RNA Viruses**

[www.mdpi.com/books/reprint/9100](http://www.mdpi.com/books/reprint/9100)

Edited by  
Ahmed El-Shamy  
Mohamed Ibrahim

ISBN 978-3-0365-9831-4 (Hardback)  
ISBN 978-3-0365-9832-1 (PDF)



RNA viruses have a rapid pace of evolutionary change. Mutations in RNA viral genomes occur at a pace that greatly exceeds that observed in other organisms and determine much of their evolutionary “behavior”. For instance, RNA viruses have a great ability to cross species barriers and, hence, emerging new human and animal viruses. Indeed, emerging RNA viruses are currently the biggest health threat to humankind to emerge in a very long time. Thus, it is crucial at this time to shed some light on how the evolutionary behavior of RNA viruses shapes their epidemiological, fitness, and pathological features. This will contribute toward a better understanding of how to deal with these threats.



Order Your Print Copy  
You can order print copies at  
[www.mdpi.com/books/reprint/9100](http://www.mdpi.com/books/reprint/9100)

MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.



## Open Access

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.



## Author Focus

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.



## High Quality & Rapid Publication

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.



## High Visibility

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).



## Print on Demand and Multiple Formats

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.