

## Special Issue

# Advances in Biomimetic Materials 2021

### Message from the Guest Editors

I invite you to contribute to a Special Issue of the journal *Applied Sciences*, “Advances in Biomimetic Materials 2021”, which aims to present recent developments in use of new functional materials in the field of biomimetics. Modern electronics needs silicon materials. The use of higher plants such as rice, horsetail, etc., with a high content of phytoliths has been proposed, as well as diatoms as a renewable raw material for the production of amorphous silica. The skeletons of sea urchins (class Echinoidea) are of particular interest. Their tests are made of stereom, this calcium carbonate material with a special three-dimensional structure offers us an approach to creating mimetic new materials with a wide range of potential applications. The resulting bulk porous material has an extremely large surface area, which significantly increases its useful functional properties, such as absorption.

### Guest Editors

Prof. Dr. Anatoliy Drozdov

A.V. Zhirmunsky National Scientific Center of Marine Biology FEB RAS,  
17 St. Palchevsky, 690041 Vladivostok, Russia

Prof. Dr. Evgeniy Papynov

Institute of Science-Intensive Technologies and Advanced Material, Far  
Eastern Federal University, 690091 Vladivostok, Russia

### Deadline for manuscript submissions

closed (20 August 2021)



## Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



[mdpi.com/si/69386](https://mdpi.com/si/69386)

*Applied Sciences*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[applsci@mdpi.com](mailto:applsci@mdpi.com)

[mdpi.com/journal/](https://mdpi.com/journal/)

[applsci](https://doi.org/10.3390/applsci)





# Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



[mdpi.com/journal/  
applsci](https://mdpi.com/journal/applsci)



## About the Journal

### 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

Prof. Dr. Giulio Nicola Cerullo  
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,  
20133 Milano, Italy

---

### 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), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering )