



## Development and Application of Silk-Proteins Based Biomaterials

Guest Editors:

**Dr. Federica Paladini**

Department Engineering for  
Innovation, University of Salento,  
Via Monteroni, 73100 Lecce, Italy

**Prof. Dr. Mauro Pollini**

Department of Experimental  
Medicine, University of Salento,  
Via Monteroni, 73100 Lecce, Italy

Deadline for manuscript  
submissions:

**closed (10 April 2023)**

### Message from the Guest Editors

Silk is an interesting biomaterial mainly composed of two proteins, namely, fibroin and sericin, characterized by excellent biological and physical–chemical properties that can be properly exploited to develop advanced materials and devices for a wide range of technological applications. Over the last decade, these proteins have received huge attention by academic research, which has explored the multiple options for processing and the incredible potential of fibroin and sericin for the development of different products with specific properties. However, although many interesting studies have been already published, more research is still needed for investigating the increasing number of applications of fibroin and sericin, particularly for tissue engineering. This Special Issue aims at exploring the most recent progresses in the development of silk proteins-based biomaterials for application in bioengineering and biotechnology, with special attention to regenerative medicine, drug delivery and wound healing. It is our pleasure to invite you to contribute full papers, review article and communication for this Special Issue.





an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada

2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

## Message from the Editor-in-Chief

*Materials* (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

## 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, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

**Journal Rank:** JCR - Q2 (*Metallurgy & Metallurgical Engineering*) / CiteScore - Q2 (*Condensed Matter Physics*)

## Contact Us

---

Materials Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

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

[mdpi.com/journal/materials](http://mdpi.com/journal/materials)  
[materials@mdpi.com](mailto:materials@mdpi.com)  
[X@Materials\\_Mdpi](https://twitter.com/Materials_Mdpi)