



## Smart Textiles for in Situ Structural Health Monitoring of Composites

Guest Editor:

**Prof. Dr. Vladan Koncar**  
ENSAIT, University of Lille, F-  
59100 Roubaix, France

Deadline for manuscript  
submissions:  
**closed (31 May 2019)**

### Message from the Guest Editor

The main objectives regarding the development of a new generation of composite structures are twofold. The first objective targets the development of monitoring devices and systems able to follow and optimize composites' manufacturing processes. The second objective aims to introduce a sensing mechanism in composites to measure *in-situ* local damages and deformations in real time. In the context of textile materials, these sensors should be compatible with the reinforcement and its manufacturing process.

We invite authors to contribute original research or reviews to this Special Issue. Potential topics include, but are not restricted to, the following:

- The development of sensors based on smart textile materials adapted to structural health monitoring in real time in situ of composite structures;
- SHM of composites, methods, procedures, and structures;
- Data treatment and analysis of information generated by embedded sensors;
- Monitoring of processes related to composite manufacturing, weaving, braiding, thermo forming, and infusion, etc.

Keywords : Smart and multifunctional textiles; Composites; Sensors; Monitoring; Optimization; Diagnostic





an Open Access Journal by MDPI

## Editor-in-Chief

**Prof. Dr. Giulio Nicola Cerullo**

Dipartimento di Fisica,  
Politecnico di Milano, Piazza L.  
da Vinci 32, 20133 Milano, Italy

## 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.

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

**Journal Rank:** JCR - Q2 (*Engineering, Multidisciplinary*) / CiteScore - Q1 (*General Engineering*)

## Contact Us

*Applied Sciences* 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/applsci](http://mdpi.com/journal/applsci)  
[applsci@mdpi.com](mailto:applsci@mdpi.com)  
X@Applsci