

## Special issue on

# Advances in nanomaterials for tissue engineering

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## CALL FOR PAPERS

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Submission Deadline: September 2, 2023

Publication Date: Jan 2024

This Issue is now open for submissions. Manuscripts should be submitted online at [aber.apacsci.com](http://aber.apacsci.com) by registering and logging in to this website. Then you can submit the manuscripts.

Papers are published upon acceptance, regardless of the Special Issue publication date.

In our journal *Nano and Medical Materials*, a special issue is calling for papers about nanomaterials for tissue engineering.

Tissue engineering evolves from the field of biomaterials development and used to be categorized as a sub-field of biomaterials, but it has grown in scope and importance so that it is considered a field of its own now. Tissue engineering refers to the practice of combining scaffolds, cells, and biologically active molecules into functional tissues. It uses cells, engineering, materials methods, and suitable biochemical and physicochemical factors to restore, improve, maintain, or replace different types of biological tissues. Tissue engineering often involves the use of cells placed on tissue scaffolds in the formation of new viable tissue for a medical purpose but is not limited to applications involving cells and tissue scaffolds.

Lately, nanomaterials have been used in technology to obtain better mechanical and biological properties. The surface conjugation and conductive properties of gold nanomaterials, the antibacterial properties of silver and other metal nanomaterials and metal oxides, the fluorescent properties of quantum dots and the unique electromechanical properties of carbon nanotubes (CNTs) make them useful in many technological applications. In addition, magnetic nanomaterials have been applied to study cellular mechanotransduction, gene delivery, control of cell patterning and the construction of complex three-dimensional tissues. The application of 2D nanomaterials in regenerative medicine has gradually developed and has been attracting a wide range of research interests in recent years due to their excellent physicochemical properties.

In this issue, we are looking forward to soliciting papers on nanomaterials in tissue engineering. Potential topics are suggested but are not limited to **the basic characteristics of nanomaterials, preparation methods of the types of nanomaterials, characterization methods of nanomaterials, research progress, the cases of application, challenges and prospects, etc.**