

## Special Issue

# Photodynamic Therapy in Cancer Treatment: Materials and Technologies

### Message from the Guest Editor

Photodynamic therapy (PDT) has been clinically approved to treat a variety of cancer and noncancer applications. It plays a direct role in the destruction of primary tumors, using a photosensitizer and light of the appropriate wavelength, which, together with oxygen, imparts cytotoxicity by producing reactive molecular species. In addition to therapeutic effects, photosensitizer-mediated fluorescence can also be used in image-guided surgery. Thanks to rapid advances in nanotechnology, sophisticated targeting approaches, and the emergence of nanocarriers for multiple therapeutic approaches, PDT in combination with chemotherapy, photothermal therapy, radiotherapy, and immunotherapy can significantly improve therapeutic efficacy and minimize off-target effects. This Special Issue, Photodynamic Therapy in Cancer Treatment: Materials and Technologies, aims to publish the latest research and translational work in the field of PDT in original articles related to nanodelivery carriers, photochemical and photobiological aspects, targeted drug delivery, tumor image-guided surgery, immunogenic cell death, and PDT-based multimodal therapies of cancer.

### Guest Editor

Dr. Dan Yang

Key Laboratory of Superlight Materials and Surface Technology, Ministry of Education, College of Materials Science and Chemical Engineering, Harbin Engineering University, Harbin, China

### Deadline for manuscript submissions

closed (20 June 2024)



## Journal of Functional Biomaterials

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## About the Journal

### Message from the Editor-in-Chief

The biomaterials field is one of the largest and fastest growing research areas both in the scientific community and in the industrial one. Biomaterials are the result of collaborations between different disciplines: chemistry, medicine, pharmacology, engineering and biology. The objective of this collaboration is to lead to the implementation of new devices to restore form and human body functions. The mission of the *Journal of Functional Biomaterials (JFB)* is to focus attention on physico-chemical characteristics and their importance in the interactions between biomaterials and living tissues. *JFB* seeks to publish studies on the preparation, performance and use of biomaterials in biomedical devices, as well as regarding their behavior in physiological environments. We are pleased to welcome you as our authors.

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### Editor-in-Chief

Prof. Dr. Pankaj Vadgama

School of Engineering and Materials Science, Queen Mary University of London, London, UK

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