Editorial

Welcome to the Journal of Bio-optics (JBiOp)

Pablo Artal

Laboratorio de Optica, Universidad de Murcia, Campus de Espinardo, 30100 Murcia, Spain; pablo@um.es
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1. Introduction

It is my great pleasure to introduce you to the new Journal of Bio-Optics (JBiOp). In a time with so many journals in every scientific discipline, you could ask the question of why another one is necessary. And why in the particular area of biomedical optics where there are already several respected journals. I put these questions on me first before accepting the role of editor-in-chief and I have some compelling answers I want to share with you. First, I always think that we can do things better or in a different way. I want to take on the challenge of building a new journal serving a varied and multidisciplinary community working in optics and photonics with an interest in medical and health applications. A community without borders and willing to collaborate and disseminate their works. The JBiOp will be fully open-access and will have modest charges for publication that will be waived on many occasions when authors need it. For a long time, I dreamed with a journal having articles of high quality providing full useful information to the readers. Papers are published because the authors have something important to say and they believe this is the correct venue, not because they want to accumulate a number of salami-type publications. I wanted a journal where tutorial and review articles have a significant space to serve students and even those interested from the general public. And also a journal where interdisciplinary is a value and not a handicap.

To achieve all these wishes, we need to count on a group of excellent associate editors. Some of them are already on board and assure a high quality when dealing with manuscripts. This journal will be open to everybody without any restriction, from those already senior and experienced in the field and those young with starting careers. We envision a long-time life to build and keep our reputation. I would like also to mention that this journal is not against any other journal, just the contrary, and is willing to collaborate with the reputed and well-established journals in the field of biomedical optics.

I will describe the list of topics in the next section, but you should consider that we have a broad interest ranging from the human eye, my own specialty, to the optical devices for health monitoring. The common line is optics and light to improve and maintain health. This is beautifully wide, combining basic science, emerging technologies, and medical applications. If you share some of my ideas expressed below, I welcome you to join the JBiOp community as an author, reviewer, and reader.

2. Aim and Scope

The Journal of Bio-optics (JBiOp) aims to provide a multidisciplinary and quality forum for scientists, engineers, and clinicians doing research and technology in optics and photonics applied or related to biology or medicine. The journal will host novel contributions to all aspects of the applications of light and its related technologies to improve health. This will cover studies from basic research to technical developments and clinically oriented studies where optics innovations play a significant role.

This journal disseminates high-quality research articles where optics and photonics approaches are fundamental for new insights or applications in biology, medicine, or clinical practice. It emphasizes interdisciplinary research to address important health challenges.

The topics of contributions in the journal include, but are not limited to:

physiological optics, including optical methods of visual correction;
vision research;
optical problems in virtual and augmented reality;
optical microscopy and imaging, including different modalities;
optical coherence tomography and its applications;
optical and photonics diagnostics technologies;
optical and photonics therapeutics technologies;

light-assisted treatments and drugs;
optical-based medical devices or microsystems;
tissue optics and light-tissue interactions and imaging;
nanophotonics and sensors with biomedical applications;
wearable or implantable optics and photonics devices for health monitoring;
optical imaging and signal processing in medical applications, including machine learning and artificial intelligence methods.

3. Outlook

The future of optical applications in the life sciences is brilliant. And I hope this journal will also shine presenting new ideas and innovations resulting in real applications. This bright prospect depends on the team of dedicated editors and basically on you, the scientist or engineer that would like to share here with the rest of the world the best of your work. I am sure that the publisher will try their best to keep high-quality standards with good distribution and accessibility. Welcome to the JBiOp!

Conflicts of Interest: The author declares no conflict of interest.