

Special Issue

Bioluminescence Imaging and Sensing: Applications in Basic and Applied Sciences

Message from the Guest Editors

Bioluminescence (BL) is a cold body radiation of light generated by a luciferase-catalyzed oxidation of a luciferin in living organisms. To date, BL has been rapidly emerging in the applications to bioassays and molecular imaging. It has been greatly harnessed by its distinctive advantages, such as the long dynamic range, high signal-to-noise ratios, and no need for external light source for excitation. Reviewing the recent BL studies, a great diversity has been witnessed in the study landscape from the basic to applied sciences: e.g., organic synthesis of luciferins, genetic mutations of luciferases, investigations on the light-emitting mechanisms, development of new bioluminescent probes, and even imaging of molecular events in animal models. This Special Issue of *Sensors* is intended to provide a communication platform for the latest developments in basic and applied science applications in BL studies, and showcases the bioanalytical utilities in cells and animal models. This Special Issue opens the opportunity for communication and welcomes the broad range of research articles.

Guest Editors

Dr. Sung-Bae Kim

Environmental Management Research Institute, National Institute of Advanced Industrial Science and Technology (AIST), Tsukuba West, 16-1, Onogawa, Tsukuba, Ibaraki 305-8569, Japan

Prof. Dr. Ramasamy Paulmurugan

Department of Radiology, Molecular Imaging Program at Stanford, Canary Centre for Cancer Early Detection, Bio-X Program, Stanford University School of Medicine, Palo Alto, CA 94304, USA

Deadline for manuscript submissions

closed (15 January 2024)



Sensors

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed



mdpi.com/si/142534

Sensors
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
sensors@mdpi.com

[mdpi.com/journal/
sensors](https://mdpi.com/journal/sensors)





Sensors

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed



[mdpi.com/journal/
sensors](https://mdpi.com/journal/sensors)



About the Journal

Message from the Editor-in-Chief

Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

Editor-in-Chief

Prof. Dr. Vittorio M. N. Passaro

Dipartimento di Ingegneria Elettrica e dell'Informazione (Department of Electrical and Information Engineering), Politecnico di Bari, Via Edoardo Orabona n. 4, 70125 Bari, Italy

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, MEDLINE, PMC, Ei Compendex, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Instruments and Instrumentation) / CiteScore - Q1 (Instrumentation)