

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

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Sensors
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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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
Department of Electrical and Information Engineering, Politecnico di
Bari, Via Orabona 4, 70126 Bari, Italy

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